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3740, Appli 66, 
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NAME: Steffe, Eric K.

REGISTRATION NUMBER: 36,688
REGISTRATION NUMBER: 1383.

TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEPAX: 202-371-2543
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 445 amino acids
TYPE: protein
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Patent No. 5981218
GENERAL INFORMATION:
APPLICANT: Rio, Marie-Christine
APPLICANT: TOMABETTO, Catherine
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Matches 135;
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CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/691,814B
FILING DATE: 31-JUL-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
CLASSIFICATION DATA:
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CLASSIFICATION THEORY APPLICATION THEORY APPLICATION DATA:
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APPLICANT: Basset, Paul
APPLICANT: Byrne, Jennifer
APPLICANT: Byrne, Jennifer
TITLE OF INVENTION: Isolated Nucleic Ac
TITLE OF INVENTION: as Leukemia Markers
NUMBER OF SEQUENCES: 124
CORRESPONDENCE ADDRESS:
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   52 RRTFCLFVTFDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVL 111
                                                                        1 MNHLP----EDMENAL-----TGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDV
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1100 New York
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York Ave, N
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US-09-949-016-9676

US-09-964-805-2

US-09-949-016-9736

US-09-543-681A-4884

US-09-252-991A-30190

US-09-252-991A-27075

US-09-949-016-6192
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US-09-241-333-3

US-09-270-767-40232

US-09-270-767-55448

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                                                                                                             Score 664; DB 2;
Pred. No. 7.5e-68;
8; Mismatches 45
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NW, Suite (
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Markers and in Breast Canc
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Patent No.
Patent No.
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2, Appli
9736, Ap
4884, Ap
30190, A
27075, A
6192, Ap
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3, Appli
40232, A
55448, A
55231168
                                                                                                               Gaps
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RESULT 3
US-08-846-762-92
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US-09-949-016-8594
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CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08
APPLICANT: Burrows, Lori
APPLICANT: Charter, Deborah
APPLICANT: de Kievit, Teresa
TITLE OF INVENTION: No. 5994072el Proteins Involved in the Synthesis and Assembly
TITLE OF INVENTION: No. 5994072el Proteins Involved in the Synthesis and Assembly
TITLE OF INVENTION: No. 5994072el Proteins Aeruginosa
TITLE OF INVENTION: No. 5994072el Proteins Aeruginosa
TITLE REFERENCE: 6580-089
CURRENT APPLICATION NUMBER: US/08/846,762A
CURRENT APPLICATION AND APPLICATION AND APPLICATION NO. 100
SOPTWARE: PATENTIN Ver. 2.0
SEQ ID NO 92
LENGTH: 341
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Sequence 92, App...
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                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Lam, Joseph S.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 207012
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164 -----AWIETWFLDFKVLPQEAEEENR 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      345 R---SSLRCCRIRFTWALALLQCLNLVFLLADV------WFGF-LPSIYLVFLIILY 391
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  288 VFKGLLWYIVPLVVVYFAEYFINQGLFELLFFWNTSLSHAQQYRWYQM---LYQAGVFAS 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110 LLGYAVLQLRHWWVIAVTTLVSSAFLIVKVILSELLSKGAFGYLLPIVSFVLAWLETWFL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64 LFVTLLWII------ELNVNGGI-----ENTLEKEVMQYDYYSSYFDIFLLAVFRF 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38;
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                                                                                                                                                                                                                                                                                                                                                                  Application US/08846762A
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Pred. No. 0.41;
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; TYPE: PRT
; ORGANISM: Klebsiella
US-09-489-039A-9711
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                                                                                                                                                                                                                                                                                                           US-09-171-699-4
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CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 9711
LENGTH: 350
                                                                                                                                                                                                                                     Sequence 4, Application US/09171699
Patent No. 6448389
GENERAL INFORMATION:
APPLICANT: The Wistar Institu
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Best Local
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
COMPUTER READABLE FORM:
                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                   TITLE OF INVENTION: No. 6448389el
                                                                                                                                                                                                                                                                                                                                                                             141 SWLPSY 146
                                                                                                                                                                                                                                                                                                                                                                                                               164 AWIETW 169
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           47 GISDVRRTFCLFVTFDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVF 106
                                                                                                                                                                                                                                                                                                                                                                                                                                              83 LLLAVSIPPLAPWWMYVLGTAF--AVVIAKQLYGGLGHNPFNPAMIGYVVLLISFPVQMT 140
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                                            CITY: Spring House
STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ETWFLDFKV
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                              COUNTRY: USA
                                                                              STREET: Spring House
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                       The Wistar Institute of,
                                                                                                                                                                                                     Berencsi,
                                                                                                                                                                                                                         Gonczol, Eva
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24.0%; Pred. No. 0.63
ative 20; Mismatches
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31.8%; Pred. No. 1.1;
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                                                                                                                                                                     Cytomegalovirus DNA Constructs and
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                                                                                  Center,
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.62;
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PCT-US94-02107-2
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                                                                                                                                                                                                                                                                                                                 Sequence 2, Application PC/TUS9402107
GENERAL INFRAMATION:
APPLICANT: The Wistar Institute of, Anatomy and Biology
TITLE OF INVENTION: Recombinant Cytomegalovirus Vaccine
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
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Best Local (
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOUTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/02107
                                                                                                                      MEDIUM TYPE: Floppy
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FILING DATE: 23-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Kodroff, Cathy A.
REGISTRATION NUMBER: 33,980
REGISTRATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9200
                                                                                                                                                                                                               STREET: Spring House Corporate Cntr, PO Box 457 CITY: Spring House STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 6.7%; Score 79.5; Local Similarity 19.3%; Pred. No. 1.
                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                               ADDRESSEE:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/171,699
PILING DATE: 19-Jan-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     227 LSCYVLEETSV-----MLAKRPLITKPEVISVMKRRIEETCMKVFAQ----YILGADPLR 277
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                                                                                                                                                                                                              APPLICANT: Furness, Michael
APPLICANT: Buchbinder, Jenny
TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS
FILE REFERENCE: PA-0041 US
CURRENT PAPLICATION NUMBER: US/09/976,594
CURRENT FILING DATE: 2001-10-12
PRIOR APPLICATION NUMBER: 60/240,409
PRIOR FILING DATE: 2000-10-12
NUMBER OF SEQ ID NOS: 1143
SOFTWARE: PERL Program
SEQ ID NO 503
LENGTH: 723
LENGTH: 723
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Best Local (
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                                             Query Match
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                                                                                                          FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6673549 2246292CD1
                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                     TYPE: PRT
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LENGTH: 406 amino acid
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APPLICATION NUMBER: US 0
FILING DATE: 12-FEB-1993
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ATTORNEY/AGENT INFORMATION:
y Match 6.7%; Score 79.5; DB 4; Length 723;
Local Similarity 18.0%; Pred. No. 4;
hes 34; Conservative 40; Mismatches 58; Indels 5
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6.7%; Score 79.5; Di
Local Similarity 19.3%; Pred. No. 1.8;
hes 52; Conservative 36; Mismatches
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TYPE: amino acid
TOPOLOGY: linear
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CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09976594
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         57;
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RESULT 9
US-09-270-767-56249
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US-09-270-767-41033
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                                                                                                                                                    Sequence 56249, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION UNMERR: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 41033
LENGTH: 221
                                              SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 56349
LENGTH: 221
TYPE: PRT
ORGANISM: Drosophila melanogaster
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Best Local
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 -09-270-767-56249
                                                                                                                                       NUMBER OF SEQ ID NOS: 62517
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              OTHER INFORMATION:
                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                             170 FLDFKVLPQEAEEENRLL------IVQDASERAAL--IPGGLSDGQF 208
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                Xaa means any amino
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Pred. No. 0.
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US-09-724-653-14
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CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: 60/167,930
PRIOR FILING DATE: 1999-11-29
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 766
                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                Sequence 14, Application US/09724653 Patent No. 6830913
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Best Local S
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                                                                                                   APPLICANT: Ling, Victor
TITLE OF INVENTION: NOVEL ABCB9 TRANSPORTER
FILE REFERENCE: APZ-004CP
                                                CURRENT APPLICATION NUMBER: US/09/724,653
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: 60/167,930
             PRIOR FILING DATE: 19
NUMBER OF SEQ ID NOS:
SOFTWARE:
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ORGANISM: Homo
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PatentIn
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                                  1999-11-29
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Pred. No. 5.
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RESULT 12
US-09-724-653-15
; Sequence 15, Ap
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CURRENT APPLICATION NUMBER: US/09/724,653

CURRENT FILING DATE: 2000-11-28

PRIOR APPLICATION NUMBER: 60/167,930

PRIOR FILING DATE: 1999-11-29

NUMBER OF SEQ ID NOS: 20

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 15

LENGTH: 766
                                                 RESULT 13
US-09-248-796A-20444
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LENGTH: 766
TYPE: PRT
ORGANISM: Homo sapiens
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Matches
               Sequence 20444, Application US/09248796A Patent No. 6747137
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Best Local :
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GENERAL INFORMATION:
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Local Similarity 18.0%;
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Local Similarity 18.0%; Pred. No. 5.7;
1es 34; Conservative 39; Mismatches 59; Indels 5
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FILE REFERENCE: 107196.132
CURRENT APPLICATION NUMBER: US/09/248,796A
CURRENT FILING DATE: 199-02-12
PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: US 60/096,409
PRIOR APPLICATION NUMBER: US 60/096,409
PRIOR FILING DATE: 1998-08-13
NUMBER OF SEQ ID NOS: 28208
SEQ ID NO 20444
LENGTH: 228
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; ORGANISM: Candida albicans
US-09-248-796A-20444
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APPLICANT: Homburger et al.
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT FILING NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 43373
LENGTH: 251
TYPE: PRT
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Best Local (
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Best Local Similarity
Matches 32; Conserv
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195 E 195
                                            183 E 183
                                                                                                                                  123 WWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWIETWFLDFKVLPQEAEE 182
                                                                                                                                                                           104 TASISVILLTÉLG--
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                                                                                                                                                                                                                     63 LLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRLRH 122
                                                                                                                                                                                                                                                                 51 PDSADNAVIESGIQSNLDVQGDLN--RPTDLSSLAE-----KPKDAADRPKTKGTFIDAF 103
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COMPUTER READABLE FORM:

(COMPUTER READABLE FORM:

(MEDIUM TYPE: Ploppy disk
(COMPUTER: IBM PC compatible
(OPERATING SYSTEM: PC-DOS/MS-DOS
(SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
(CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/833,752
PILING DATE: 9-APR-1997
(CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 355 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: mo. 6448375e
US-08-833-752-9

6.5%; SCORE 78; DB 4; Length:
TOPOLOGY: linear
MOLECULE TYPE: No. 6448375e
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US-08-833-752-9
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Search completed: May 17, 2005, 10:22:40 Job time : 37 secs
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Patent No. 6448375
                                                                                                                                                                                                                                                                                                                                                                                               Query Match 6.5%; Score 78; DB 4; Length 355; Best Local Similarity 23.2%; Pred. No. 2.2; Matches 39; Conservative 25; Mismatches 60; Indels
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ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: SAMSON, MICHEL
APPLICANT: PARMENTIER, MARC
APPLICANT: VASSART, GILBERT
APPLICANT: LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
TITLE OF INVENTION: AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
NUMBER OF SEQUENCES: 17
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COUNTRY: U.
ZIP: 92660
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1: uniprot_sprot:*
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AC Q9DCT3; Q99J63;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
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c. Natl. Acad. Sci. U.S.
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SIMILARITY: Contains 1 MENTAL domain.
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ALTERNATIVE PRODUCTS:
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                                                                                                                                                                                                         EEENRLLIVQDASERAALIPGGLSDGQFYSPPESEAGSEEAEEKQDSEKPLLEL
                                                                                                                                                                                                                                                                                      FDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MNHLPEDMENALTGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDVRRTFCLFVT
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                                                                                                                                                                           EBENRILIVQDASERAALIPGGLSDGQFYSPPBSEAGSBBAEEKQDSEKPLLEL
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  STANDARD; Q9D356;
                                                                                                                                                                                                                                                                                                                                                                                                       VTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRL
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        RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).

RR SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).

RR CETRAIN=C57BL/6J; TISSUB-Cerebellum, and Kidney;

RX MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;

RX MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;

RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,

RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,

RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,

RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,

RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,

RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,

RA Baldar B., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,

RA Gassterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,

RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,

RA Kanai B., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,

RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,

RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,

RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,

RA Magiott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,

RA Magiott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,

RA Magiott D.R., Maltais L., Marchionni L., McKenzie G., Pesole G.,

RA Petroysky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,

RA Ravasi T., Reed D.J., Reid J., Ring B.Z., Ringwald M.,

RA Sandelin A., Schneider C., Sample C.A., Setou M., Shimada K.,

RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,

RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,

RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,

RA Milming L.G., Wynshaw-Boris A., Yanagisawa K., Arakawa T., Fukuda S.,

RA Haya A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,

RA Myazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,

RA Hayashizaki Y.,
                                                                                                                                                                                                                                                RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Rax S.I., Wang J., Hsieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapleton M., Ugdin T.B., Toshiyuki S., Carninci F., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Pahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Raking M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
"Generation and initial analysis of more than 15,000 full-length human
                                                                                Nature
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28-FEB-2003 (Rel. 41, Last sequence update)
05-JTL-2004 (Rel. 44, Last amnotation update)
MLN64 N-terminal domain homolog (STARD3 N-terminal like protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. (ISOFORM 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Analysis of the mouse transcriptome based on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Birney E., Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria;
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                                IsoId=Q9DCI3-1; Sequence=Displayed
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Sciurognathi; Muridae; Murinae; Mus.
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Query Match
Best Local S
Matches 223
Brachydanio rerio (Zebrafish) (
Eukaryota; Metazoa; Chordata; C
Actinopterygii; Neopterygii; Te
Cyprinidae; Danio.
NCBI_TaxID=7955;
[1]
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Q6DI38;
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Note=No experimental confirmation available;
SIMILARITY: Contains 1 MENTAL domain.
CAUTION: Ref. 1 (BAB31166) sequence differs fro
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AK018331; BAB31166.1; ALT_FRAME.
, BC003334; AAH03334.1; -.
MGI:1923455; Stard3nl.
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48 218 MENTAL.
1 53 Cytoplasmic (Potential).
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Cyroplasmic (Potential).

SEEBABEKQESEKPLLEL -> RNSSAFRMGI

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Craniata; Vertebrata; Euteleostomi;
Teleostei; Ostariophysi; Cypriniform
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QL -> HS (in Ref. 1; BAB22337).
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WARDLINE-22380557; PubMed=12477932; DOI=10.1073/pnas.242603899;
WARDLINE-22380557; Peingold B.A., Grouse L.H., Derge J.G.,
WARDLINE-22380557; PubMed=12477932; DOI=10.1073/pnas.242603899;
WARDLINE-22380557; PubMed=12477932; Doi=10.1073/pnas.24260389;
WARDLINE-2238057; PubMed=12477932; Doi=10.1073/pnas.24260389;
WARDLINE-2238057; PubMed=12477932; Doi=10.1073/pnas.24260389;
WARDLINE-238057; PubMed=12477932; Doi=10.1073/pnas.24260389;
WARDLINE-248057; PubMed=12477932; Doi=10.1073/pnas.24260389;
WARDLINE-2480605, Pubmed=12477932; Doi=10.1073/pnas.24260389;
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TISSUE=Embryo;

PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.
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EMBL; BC07
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Name=stard3-prov;
Xenopus tropicalis (Western
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Jones S.U., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
"OFFICE OFFICE OFFI
                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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Amphibia, Batrachia, Anura,
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Pred. No. 5.1e-64;
1; Mismatches 39
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        SEQUENCE FROM N.A.

TISSUE-spleen;
MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausbberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler
                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus.
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SMART; SM00224; START; 1.
PROSITE; PS50848; START; 1.
SEQUENCE 448 AA; 50926 MW;
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Xenopus laevis (African clawed frog)
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Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
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J.G.,
M., Schuler G.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
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RESULT
Q6GNT3
ID Q6
AC Q6
AC Q6
DT 05
DT 05
DT 05
DT N8

QGGNT3; Q6GNT3

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05-JUL-2004 (TrEMBLrel. 05-JUL-2004 (TrEMBLrel. 05-JUL-2004 (TrEMBLrel.

(TrEMBLrel.

27,

Created)
Last sequence up

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update)

PRELIMINARY;

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MGC80895 protein. Name=MGC80895;

MGC80895

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Best Local
                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Ugdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Krzywinski M.I., Skalska U., Smailus D.B., Schnerch A., Schein J.E., Tones S.T. Marra M. B.
                                                                                                                                                                                                                                                                                                                PRINTS: PR00978; STARPROTEIN.
SMART; SM00234; START; 1.
PROSITE; PS50848; START; 1.
SEQUENCE 444 AA; 50572 MW;
                                                                                                                                                                                                                                                                                                                                                                                                            Klein S., Strausberg R.;
Submitted (SEP-2003) to the EMBL/GenBank/DDB
EMBL; BC057738; AAH57738.1; -.
GO; GO:0015485; F:cholesterol binding; IEA.
GO; GO:0017127; F:cholesterol transporter ac
GO; GO:0006694; P:steroid biosynthesis; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR000799; StAR. InterPro; IPR002913; START.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Klein S.L., U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Spleen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174; Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Altschul S.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         initiative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Genetic
                             181
                                                              115
                                                                                            121
                                                                                                                                                                                                                                                      140;
                                                                                                                           55
                                                                                                                                                         61
                                                                                                                                                                                        μ
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                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and
                   EEENRLLIVQDASERAALI-PGGLSDGQFYSPPESEAGSEEAEEKQDSEK
                                                                               RHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWIETWFLDFKVLPQEA
                                                                                                                                                                                                             MNHLPEDMENALTGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDVRRTFCLFVT
                                                           FDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRL
                                                                                                                                                                                      MTKIPGDFQPDLERSLPAIASMSQSHVFSPRSLLPR-----EQRRAISDVRRTFCLFVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FROM N.A.
EEERWYIAAQAAATHPSLLYNGALSDGQFYSPPESFAGSD--NEFDDEEE
                                                                                                                           FDLLF1SLLWI1ELNTNNGIEKNLEEEILYYDFKNSFFDIFLLAVFRFSVLILAYAIVRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        225:384-391 (2002) .
                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genomic tools for Xenopus research: The NIH Xenopus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zeeberg
                                                                                                                                                                                                                                                                    58.5%;
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to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                      30;
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                                                                                                                                                                                                                                                                    Score 698.5;
Pred. No. 7.9
                                                                                                                                                                                                                                                                                                                     7BEA97317BF48358 CRC64;
                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schaefer C.F.,
                                                                                                                                                                                                                                                                     .9e-55;
                                                                                                                                                                                                                                                                                                                                                                                                                                activity; IEA
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                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                  Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   full-length
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                                229
                                                                                                                                                                                                                                                        9;
                                                                                                                                                                                                                                                        Gaps
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Kilausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

A Altschul S.F., Zeeberg B., Buttow H.H., Schaefer C.F., Bhat N.K.,

A Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Hopkins R.F., Jordan H., Moore T., Rubin G.M., Hong L.,

A Hopkins R.F., Jordan H., Moore T., Rubin G.M., Hong L.,

A Stempleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Stempleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Hilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

A Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Whiting M., Touchman J.W., Green B.D., Dickson M.C.,

Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

Jones G. T. Marra M. A.
                                                                                                                                                                                                                                                                                                     Query Match
Best Local 8
Matches 139
                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS; PRO0978; STARPROTEIN. SMART; SM00234; START; 1. PROSITE; PS50848; START; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batzachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Klein 8., Gerhard D.S.;
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; BC073419; AAH73419.1; GO; GO:0015485; F:cholesterol binding; IEA. GO; GO:0017127; F:cholesterol transporter a GO; GO:0017127; F:steroid biosynthesis; IEA. GO; GO:0006694; P:steroid biosynthesis; IEA InterPro; IPR002913; START. INTERPRO; PF01852; START; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-Embryo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     initiative.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Genetic and genomic initiative.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Generation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mouse cDNA sequences."
                                                                                                                                            55
                                                                                                                                                                                  57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .J., Marra M.A.;
                                                                                                                                                                                                                                                                                                                          Similarity
PQEAEEENRLLIVQ-DASERAALIPGGLSDGQFYSPPESEAGSE-EAEEKQDS
                                                              IVRLRHWWAIAITTLVTSAFLIVKVIQSGLLSKGAFGYVLPIVSFVLAWLETWFLDFKVL
                                                                                      VCRLRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWIETWFLDFKVL
: |||||||:||:||||||:
                                                                                                                                        LPVTPDLLPISCLWIIELNTNNGIEKNLEEBILHYDFKNSFFDIYLLAVFRFSVLILAYA
                                                                                                                                                                                                                                                             MNHLP----EDMENALTGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDVRRTFC
                                                                                                                                                                                LEVTEDLLEVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYEDIELLAVEREKVLILAYA
                                                                                                                                                                                                                          MTKLPGEFQPDLERSLPAIASINSSMSHNHVFSPHSLLPR-----EQRRLISDVRRTFC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerhard D.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  225:384-391 (2002) .
                                                                                                                                                                                                                                                                                                                                                                                     448 AA;
                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and initial analysis
                                                                                                                                                                                                                                                                                                                                                                                     51279
                                                                                                                                                                                                                                                                                                                      57.2%; Score 684; DB 2; 59.7%; Pred. No. 1.6e-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        toole
                                                                                                                                                                                                                                                                                                                                                                                     MW; 472FF8E7C3B2F5E4 CRC64;
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                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  activity; IEA
                                                                                                                                                                                                                                                                                                       48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             databases.
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                                                                                                                                                                                                                                                                                                                                           Length 448;
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                       227
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RC MIBDLINE=22388257; pubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Altschul S.F., Zebberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zebberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zebberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usein T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., Loquellano N.A., Sodergren E.J., Lu X., Gibbs R.A.,
RICHARDS S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Rodrigues S., Sanchez A.,
RA Richards S., Worley N.C., Shevchenko Y., Bouffard G.G.,
RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Willalon D.K., Toung A.C., Shevchenko Y., Bouffard G.G.,
RA Pahey J., Helton E., Ketteman M., Green E.D., Dickson M.C.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Oesophageal carcinoma;
MEDLINE-97413641; PubMed=9270077;
Akiyama N., Sasaki H., Ishizuka T., Kishi T., Sakamoto Hirai H., Yazaki Y., Sugimura T., Terada M.;
"Isolation of a candidate gene, CAB1, for cholesterol mitochondria from the c-ERBB-2 amplicon by a modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
MLN 64 protein (StAR-related lipid transfer protein domain-containing protein 3) (CABI protein).
NamesTRANJ; Synonyms-CABI, MLN64;
Homo sapiens (Human)
  MEDLINE=21264925; PubMed=11053434; DOI=10.1074/jbc.M006279200; Alpy F., Stoeckel M.-E., Dierich A., Escola J.-M., Wendling C. Chenard M.-P. Vanter M.T., Gruenberg J., Tomasetto C., Rio M. "The steroidogenic acute regulatory protein homolog MLN64, a l
                                                                                                                                                                                           X-RAY CRYSTALLOGRAPHY (2.2 ANGSTROMS) OF 216-445.
MEDLINE=20264523; PubMed=10802740; DOI=10.1038/75192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        method."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tomasetto C.L., Regnier C.H., Moog-Lutz C., Mattei M.-G., Chenard M.-P., Lidereau R., Basset P., Rio M.-C.; "Identification of four novel human genes amplified and overexpressed in breast carcinoma and localized to the q11-q21.3 region of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Breast carcinoma;
MEDLINE=96039245; PubMed=7490069;
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Mammalia; Eutheria;
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                                                                                                                               ., Hurley J.H.;
nd lipid transport mechanism of a StAR-related
Biol. 7:408-414(2000).
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Primates;
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EMBL; X80198; CAA56489.1; -.
EMBL; D38255; BAA22825.1; -.
EMBL; BC008356; AAH08356.1; -.
EMBL; BC008747; AAH08747.1; -.
EMBL; BC025679; AAH25679.1; -.
EMBL; BC025679; AAH25679.1; -.
PIR; I38027; I38027.
PIB; I2M2; X-Tay; A=216-444.
GGBEW; HGNC:17579; STARD3.
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SMART; SM00234; START; 1.
PROSITE; PS50048; START; 1.
3D-structure; Lipid transport; Lipid-binding; Steroidogenesis;
Transmembrane; Transport.
                                                                                                                                                                                                                                                                                                                                                                                                                                       8888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        endosomal cholesterol-binding protein.";
J. Biol. Chem. 276:4261-4269 (2001).
-I- FUNCTION: Binds and transports cholesterol. Promotes steroidogenesis in placenta and brain.
-I- SUBCELLULAR LOCATION: Integral membrane protein. Late
                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000799; StAR.
InterPro; IPR002913; START.
Pfam; PF01852; START; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genew; HGNC:17579; STARI
H-InvDB; HIX0013780; -.
MIM; 607048; -.
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G0:0008203; P:cholesterol metabolism; TAS.
G0:0006839; P:mitochondrial transport; TAS.
G0:00068202; P:steroid metabolism; TAS.
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SIMILARITY: Contains 1 MENTAL domain.
SIMILARITY: Contains 1 START domain.
SIMILARITY: Contains 1 START domain.
DATABASE: NAME-Atlas Genet. Cytogenet. Oncol. Haematol.;
MMW-"http://www.infobiogen.fr/services/chromcancer/Genes/MLN64ID202.html".
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3; AAH25679).
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MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Brownstein M.J., McKernan K.J., Mahek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ML64 MOUSE STANDARD; PRT; 446 AA. 061542;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
MLN 64 protein (StAR-related lipid transfer protein domain-containing protein 3) (ES 64 protein).
Name=Stard3; Synonyms=Es64, Mln64;
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                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. TISSUE=Breast;
                                                                                                                                                                                                                                                                                                                                                                                                                        Tomasetto C.L., Regnier C.H., Moog-Lutz C., Mattei M.-G., Chenard M.-P., Lidereau R., Basset P., Rio M.-C.; Chenard M.-P., todereau R., Basset P., Rio M.-C.; Orleantification of four novel human genes amplified and overexpressed in breast carcinoma and localized to the q11-q21.3 region of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE=96039245; PubMed=7490069;
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Mammalia; Eutheria;
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- SUBCELLULAR LOCATION: Integral membrane protein. Late (membrane protein (By similarity).
- SIMILARITY: Contains 1 MENTAL domain.
- SIMILARITY: Contains 1 START domain.
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                                                                                                                                                                                                                                                                                                                                                      DOMAIN
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR00978; STARPROTEIN.
SMART; SM00234; START; 1.
PROSITE; PS50848; START; 1.
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InterPro; IPR002913; START.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lipid transport; Lipid-binding; Steroidogenesis; Transmembrane;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF01852; START; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MGI:1929618; Stard3.
                                                                      181
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                                                                                                                                                        122
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                                                                                                                                                                                                             62
                                                                                                                                                                                                                                        11 DLERSLPALASIGTSISHSQSISSHFIPPPL-----EKRRAISDVRRTFCLFVTF
                                                                                    EENRLLIVQDASERAALI-PGGLSDGQPYSPPESEAGSE-EAEEKQDSEK 229
                                                                                                                            HWWVIAVTTLVSSAFLIVKVILSELLSKGAFGYLLPIVSFVLAWLETWFLDFKVLPQEAE
                                                                                                                                            HWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWIETWFLDFKVLPQEAE
                                                                                                                                                                                 DLLFISLLWIIELNTNTGIRKNLEQEVIHYSFQSSFFDIFVLAFFRFSGLLLGYAVLRLQ
                                                                                                                                                                                                  DLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRLR
                                                                                                                                                                                                                                                           DMENAL----TGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDVRRTFCLFVTF
                                                                    EERWYLAAQAAVARGPLLFSGALSEGQFYSPPESFAGSDNESDEEVTGKK
                                                                                                                                                                                                                                                                                                  Conservative
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  PRELIMINARY;
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                                                                                                                                                                                                                                                                                                             Score 656.5;
Pred. No. 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                     Potential.
Cytoplasmic (Potential).
Potential.
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Potential.
Extracellular (Potential).
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  PRT;
                                                                                                                                                                                                                                                                                                                                                        DBF4359604F3E1E2 CRC64;
                                                                                                                                                                                                                                                                                                  Mismatches
  448
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                                                                                                                                                                                                                                                                                                               le-51;
                                                                                                                                                                                                                                                                                                                          DB 1,
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                                                                                                                                                                                                                                                                                                                          Length 446;
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RESULT 10
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"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences ";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR000799; StAR.
InterPro; IPR003913; START.
Pfam; PF01852; START; 1.
PRINTS; PR00978; STARPROTEIN.
SMART; SM00234; START; 1.
PROSITE; PS50848; START; 1.
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05-JUL-2004
05-JUL-2004
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Bukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii; T
Cyprinidae; Danio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GO; GO:0015485; F:cholesterol binding; IEA.
GO; GO:0017127; F:cholesterol transporter a
GO; GO:0006694; P:steroid biosynthesis; IEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; BC056766; AAH56766.1; -. ZFIN; ZDB-GENE-001120-2; stard3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=AB; TISSUE=Whole body;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnae.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                     163
                                                                                                                                                                                                          164
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                    AWIETWFLDFKVLPQEAEEEN-RLLIVQDASERAALI-PGGLSDGQFYSFPESEAGSEE 220
                                                                                                                                                                                                                                                                     ERKAPSDVRRTFCLEVTFDLLFITLLWIIELNISKSIWNSLENEVVHYNFKSSFFDIFLL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        448
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(TrEMBLrel.
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Last sequence update)
Last annotation update)
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; Craniata; Vertebrata; Euteleostomi;
Teleostei; Ostariophysi; Cypriniformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 632;
Pred. No. 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8.6e-49;
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Q8BMP8

PRELIMINARY;

PRT;

107

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EP SEQUENCE FROM N.A.

(CSTRAIN=C57BL/6J; TISSUE=Pituitary gland;

(CSTRAIN=C57BL/6J; TISSUE=Pituitary gland;

(A Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,

(A Adachi J., Aizawa K., Akimura T., Hara A., Hashizume W.,

(A Adachi J., Karan K., Ishii Y., Itoh M., Kagawa T., Kasukawa T.,

(A Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kasukawa T.,

(A Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Koya S.,

(A Katoh H., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh H., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Kawai J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Katoh J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Katoh J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Katoh J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Katoh J., Kojima Y., Kondo S., Konno H.,

(A Katoh R., Katoh J., Kojima Y., Kojima Y., Kojima Y.,

(A Katoh R., Katoh J., Kojima Y., Kojima Y., Kojima Y.,

(A Katoh R., Katoh J., Kojima Y., Kojima Y., Kojima Y.,

(A Katoh R., Katoh J., Katoh J., Kojima Y.,

(A Katoh R., Katoh J., Katoh J., Kojima Y.,

(A Katoh R., Katoh J., Kojima Y., Kojima Y.,

(A Katoh R., Katoh J., Katoh J., Kojima Y.,

(A Katoh R., Katoh J., Katoh J., Kojima 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EF SEQUENCE FROM N.A.

ESTRAIN-C57BL/6J; TISSUE=pituitary gland;

EX STRAIN-C57BL/6J; TISSUE=pituitary gland;

EX STRAIN-C57BL/6J; TISSUE=pituitary gland;

EX SHIDATA K., Itch M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,

EX Shibata K., Itch M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,

EX Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,

EX Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,

EX Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,

EX Yoneda Y., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M.,

EX Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

EX Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

EX Yoneda Y., Maramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

EX TRIKEN integrated sequence analysis (RISA) system-384-format

EX Sequencing pipeline with 384 multicapillary sequencer.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q8BMP8;
01-MAR-2003
01-MAR-2003
01-MAR-2003
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STRAIN-C57BL/6J; TISSUE-Pituitary gland;
STRAIN-C57BL/6J; TISSUE-Pituitary gland;
MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., It
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new ge
genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2003 (TERMBLEEL 23, Created)
01-MAR-2003 (TERMBLEEL 23, Last sequence update)
01-MAR-2003 (TERMBLEEL 23, Last sequence update)
01-MAR-2003 (TERMBLEEL 23, Last annotation update)
Mus musculus adult male pituitary gland cDNA, RIKEN full-length
Mus musculus adult male pituitary gland cDNA, RIKEN full-length
enriched library, clone:530402M06 product:H NH1021A08.1 PROTEIN
(UNKNOWN) (PROTEIN FOR MGC:14607) (SIMILAR TŌ STEROIDOGENIC ACUTE
REGULATORY PROTEIN RELATED) homolog.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Pituitary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Pituitary gland;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the RIKEN Genome Exploration Research Group "Analysis of the mouse transcriptome based 60,770 full-length cDNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

TISSUE-Pituitary gland;

TOTAL BOIL
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MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nature 409:685-690(2001).
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Sciurognathi; Muridae;
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on functional annotation
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
NON_TER
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SEQUENCE
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Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
-i- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anopheles gambiae str. PEST.
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Anopheles.
NCBI_TaxID=180454;
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01-MAR-2004 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR00978; STARPROTEIN. PROSITE; PS50848; START; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Name=agCG52468; ORFNames=ENSANGG00000018959;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AgCP3158 (Fragment)
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InterPro; IPR002913; START.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preliminary data.
L; AAAB01008807; EAA03945.1; -.
GO:0015485; F:cholesterol binding; IEA.
GO:0017127; F:cholesterol transporter activity; IEA.
GO:0006694; P:steroid biosynthesis; IEA.
  168
                                                                                             108
                                          188
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                                                                                                                                                                                                                                    71 IIELNVNG-GIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRLRHWWAIALT
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AITNPGSMDARTPLLDPFLSAMQAGRTESIGNFYSPFDSIHNSDDDDDDDDDDDDDDDDD
                                                                                        TTSSCAFLISKVFLYDWTATPOPVFEVLLIVVSFVLAWGEAWFLDCRVIPOERYARNYFV
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                                          IVQDASERAALIP-----GGLSD--GQFYSPPES--EAGSEEAEEKQDSE
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; 62932 MW;
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                                                                                                                                                                                                                                                                                                                                                                                 Score 348; DB 2;
Pred. No. 6.7e-23;
5; Mismatches 72
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Pred. No. 8.2e-37;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ECEB3D361A05DF15 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 568;
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RESULT 12
Q8MZH4
ID Q8MZH
AC Q8MZH

Q8MZH4;

PRELIMINARY;

PRT;

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RA Adams N.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Adams N.D., Celniker S.E., Hill R.A., Howns C.A., Golayes J.D.,
RA Amanatides P.G., Scherer S.E., Hill R.M., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Ballew R.M., Royle C., Baxter E.G., Helt G., Nelson C.R., Gabor G.L.,
RA Abril J.F., Agbayani A., An H.J., Andrews-Feannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bothhakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokatein P., Brottiter P.,
RA Borkova D., Botchan M.R., Bouck J., Brokatein P., Brottiter S.M.,
RA Ghory J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Borkova D., Botchan N.R., Bouck J., Brokatein P., Brotter S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Golodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Hostin D., Houston K.A., Howland T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.H., Tiegwam C.,
RA Mchulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Noshrefi A.,
RA Mchulov G., Milshina N.V., Saunders R.D., Scheeler F., Shan H.,
RA Reinert K., Remington K., Saunders R.D., Scheeler F., Shan H.,
RA Reiner E., Spradling A.C., Stapleton M., Strong R.H., Wang X.,
RA Reiner E., Spradling A.C., Stapleton M., Strong R.H., Wang X.,
RA Williams S.M., WoodageT, Worley K.C., Wu D., Yang S., Yao Q.A., Ye J.,
RA Abens R.H., WoodageT, Worley K.C., Wu D., Yang S., Yao Q.A., Ye J.,
RA Schen S., Shang G., Zhon Q., Zhon Q., Zhon Q., Zhon G., Zhon 
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01-OCT-2002 (TrEMBLrel
25-OCT-2004 (TrEMBLrel
LD23890p (CG3522-PB).
ORFNames=CG3522;
Calliker S.E., Wheeler D.A., Krommiller B., Carlson J.W., Halper Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A., George R.A., Hoskins R.A., Laverty T., Muzny D.M., Nelson C.R., Pacleb J.M., Park S., Pfeiffer B.D., Richards S., Sodergren E.J. Svirskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Vent Weinstock G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G.M., "Finishing a whole-genome shotgun: Release 3 of the Drosophila melanogaster euchromatic genome sequence.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Dreensk D., Farfan D., Frise B., George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G., Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S. Patel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Neoptara; Endoptarygota; Diptera; Brachycera;
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID=7227
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Celniker S.;
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Eukaryota; Metazoa; Arthropoda;
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287:2185-2195(2000).
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Misra S., Crosby M.A., Mungall C.J., Malthews B.B., Campbell K.S.,
Misra S., Crosby M.A., Mungall C.J., Milburn G.H., Prochnik S.B.,
Example P., Huang Y., Kaminker J.S., Milburn G.H., Prochnik S.B.,
Smith C.D., Tupy J.L., Whitfied B.J., Bayraktaroglu L., Berman B.P.,
Bettencourt B.R., Celniker S.E., de Grey A.D., Drysdale R.A.,
Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
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SEQUENCE FROM N.A.
MEDLINE=22426070; PubMed=12537573;
Martinan C.M., Kronm
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Genome Biol. 3:RESEARCH0084-RESEARCH0084(2002)
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Ashburner M., Celniker S.
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transporter a
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ORFNames=CG3522

melanogaster (Fruit fly)

cholesterol transporter)

Pterygota;

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RA Abril J.F., Agbayani A. An H.J., Andrews-Pfannkoch C., Beldwin D., RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M., RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., RA Borkova D., Bocchan M.R., Bouck J., Brokstein P., Brottier P., Rottier P., Rottier P., Rottier P., Bolshakov S., RA Cherry J.M., Cawley S., Dahlke C., Davenportt L.B., Davies P., RA Cherry J.M., Cawley S., Dahlke C., Davenportt L.B., Davies P., RA Cherry J.M., Cawley S., Dahlke C., Davenportt L.B., Davies P., RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P., RA Durbin K.J., Evangelista C.C., Ferrac C., Ferriera S., Fleischmann W., RA Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K., RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M., Glasser K., Ra Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M., RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J., RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J., RA Lasko P., Lei Y., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A., RA Liu X., Mattei B., Wolntosh T.C., McLeod M.P., Liang Y., Lin X., RA Liu X., Mattei B., Willshina N.V., Mobarry C., Morris J., Moshrefi A., Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A., RA Menscolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., RA Rainert K., Renington K., Saunders R.D., Scheeler F., Shen H., RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., RA Wang Z.Y., Wassarman D.A., Weinstock G.M., Weissenbach J., Ra Kallam S.M., Woodaget, Worley K.C., Wu D., Yang S., Yao Q.A., Ye J., RA Yeh R.F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L., The genome sequence of Drosophila melanogaster.";

"The genome sequence of Drosophila melanogaster.";
                                                                           MEDLINE=22426069; |
Misra S., Crosby M
Hradecky P., Huang
Smith C.D., Tupy J
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Celniker S.E., Wheeler D.A., Kronmiller B., Carlson J.W., Halpern Celniker S.E., Hodgson A.,
Patel S., Adams M., Champe M., Dugan S.P., Frise B., Hodgson A.,
George R.A., Hoskins R.A., Laverty T., Muzny D.M., Nelson C.R.,
Pacleb J.M., Park S., Pfeiffer B.D., Richards S., Sodergren E.J.,
Prinshing a Whole-genome Shotgun: Release 3 of the Drosophila
melanogaster euchromatic genome sequence.";
Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
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MEDLINE=22426070; PubMed=12537573;
Kaminker J.S., Bergman C.M., Kronmiller
Patel S., Frise E., Wheeler D.A., Lewis
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                                                                                                                                                                                                                                                                                                                   Ashburner M., Celniker S.E.;
"The transposable elements of the Drosophila m
a genomics perspective.";
Genome Biol. 3:RESEARCH0084-RESEARCH0084(2002)
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Ephydroidea; Drosophilidae; Drosophila
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P., Huang Y., I
D., Tupy J.L., V
art B.R., Celnil
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PubMed=12537572;
M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
Mg Y., Kaminker J.S., Millburn G.H., Prochnik S.B.
J.L., Whitfied E.J., Bayraktaroglu L., Berman B.P.
Celniker S.E., de Grey A.D., Drysdale R.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B., C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carlson J.,
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Reese M.G.,
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Last Last Created)

sequence update) annotation updat

Eukaryota; Metazoa; Nemata Rhabditidae; Peloderinae;

oda; Chromadorea; Rhabditida; Rhabditoidea; Caenorhabditis.

NCBI_TaxID=6239;

SEQUENCE FROM N.A. STRAIN=Bristol N2; MEDLINE=99069613;

PubMed=9851916;

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RESULT
Q19819
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DT 01
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01-MAR-2002 (TrEMBLrel. 22, La
01-MAR-2004 (TrEMBLrel. 26, La
Hypothetical protein F26F4.4.
ORFNames=F26F4.4, F26F4.4.
Caenorhabdit:
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01-NOV-1996 (TrEMBLrel.
01-OCT-2002 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
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GO; GC:0015485; F:chbclesterol binding; I
GO; GO:0017177; F:chbclesterol transporte
GO; GO:0006694; P:steroid biosynthesis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
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AE003464; AAF47232.2; -.
AY455866; AAR19767.1; -.
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l transporter act
osynthesis; IEA.
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1., Rubin
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RESULT 15
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Best Local 8
Matches 56
                                                                                                                                              ML64 SALFO
Q90ZB9;
28-FEB-2003
                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Salvelinus.
                                                                                                    28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
MIN64-1ike protein (Fragment)
                                                                                                                                                                                           SALFO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS50848; START; 1.
Hypothetical protein.
SEQUENCE 447 AA; 51543 M
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WormBep; F26F4.4; CE30767. 
InterPro; IPR002913; START. 
Pfam; PP01852; START; 1. 
SMART; BM00234; START; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium.", Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U12964; AAA91219.3; PIR; T16170; T16170.
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STRAIN-Bristol N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "The sequence of C. elegans Submitted (NOV-1994) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN-Bristol N2;
                                                                                Salvelinus fontinalis (Brook trout) (Brook char).
                                                                                              Name=MLN64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (AUG-2004)
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                      NCBI_TaxID=8038;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17.1%; Score 204; DB 2; Length 447; ilarity 26.5%; Pred. No. 5.9e-10; Conservative 36; Mismatches 73; Indels
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C;Genet	conserved hypothet	F72342	N	276			1489	
A;Exper	NADH2 dehydrogenas	S42168	N	274			4	
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A;MOLEC	hypotherical proce	118998	s N	3 6			1485	
A;Statu	hypothetical prote	T19811	אנ	225			4	
A; Acces	conserved hypothet	A83521	N	212		-	8	
A; Refer	nucleoplasmin A -	A26630	N	190			1482	
A:Descr	conserved hypothet	H69327	, v	185			44	
א; אינונס	hypothetical prote	540726	N	176			4	
C; Acces	hypothetical prote	G89947	N	176		-	47	
C;Date:	hypothetical prote	H97775	N	173		_	47	
C;Speci	epithelial membran	JC5045	ω,	163		61.5	1476	
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	liporotein gional	201718) K	163			1473	
-	probable NADH2 deh	843955	N	150			1472	
	hypothetical prote	C86655	N	149	•	_	1471	
Дb	hypothetical prote	E69985	N	134	•	_	1470	
	hypothetical prote	в99233	N	99	•	_	1469	
	bacitracin synthet	T31679	N	6359		60	4	
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Ş	hypothetical prote	T18939	N	1283	•	62	6	
	in	C96767	N	1273		62	1463	
Db	protein C16A3.7 [i	G88480	N	1242		62	46	
	hypothetical prote	T29010	N	1041		62	1461	
8	hypothetical prote	T43458	N	1031		62	1460	
	Rab6 GTPase activa	T13163	N	1030		62	1459	
Db	acriflavin resista	AE3557	N	1024		62	1458	
ž,	conserved membrane	G97217	N F	1002		9 0	1457	
5	pentertiti-printing	CYCLYL	٠,	950		v 0	1456	
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Best	97K alpha trans-in	TNBEEH	,	872		62	1453	
Query	tegument protein 1	T42556	N	864		62	45	
	aminopeptidase N [E95092	N	848	•	62	1451	
A;Gene:	vacuolar assembly	T09455	N	841		6 6	5	
A;NOCE:	cycochrome-c oxida	A46616	۸ د	16/	•	5 6		_
A;Cross	protein H06H21.10	A88679	ง	756		600	144	
A; Resid	probable ABC trans	873829	N	750	•	62	44	
A;Molec	101K malaria antig	A29232	ν	743		62	1445	
A;Statu	hypothetical prote	T25030	N	739		62	4	
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C;Acces	feras	S46952	μ	675	•	62	1438	
C;Date:	hypothetical prote	T20799	N	667		62	1437	
C.Speci	amino acid transpo	1.20034 4.00034	s r	4 6	•	5 S	1435	
138027	PTS system, beta-g	H83686	N	630	•	62	1434	
RESULT	ATP-binding transp	H98149	N	600	•	62	1433	
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	hypothetical prote	T02360	N 1	50.0		62	1431	
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	protein P2 - Acyrt	T08869) N	1 U		62	1428	
1500	nicotinic acetylch	ACCH2N	-	528	•	62	1427	
1499	Ammonium transport	A96671	N	514	•	62	1426	
1498	hypothetical prote	AE2372	N	502		62	1425	
1497	probable periplasm	B81914	N N	499		6, 6	1424	
1495	NAUHZ denydrogenas	853834	٠,	497	•	5 S	1422	
1494	probable 3-oxoacyl	T05271	۰ ۷	487	•	6 6 2	1421	
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1492	prot	E64232	N I	474		60	1419	
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#16170
hypothetical protein F26F4.4 - Caenorhabditis elegans
C.Species: Caenorhabditis elegans
C.Species: Caenorhabditis elegans
C.Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 09-Jul-2004
C.Accession: T16170
R.Fulton, L.
Submitted to the EMBL Data Library, March 1996
A.Description: The sequence of C. elegans cosmid F26F4.
A.Reference number: Z18471
A.Recession: T16170
A.Status: preliminary; translated from GB/EMBL/DDBJ
A.Holecule type: DNA
A.Residues: 1-478 <FUL>
A.Residues: 1-478 <FUL>
A.Residues: UNIPROT:Q19819; EMBL:U12964; NID:g1213452; PID:g529202; PIDN:AAA9121:
A.Experimental source: strain Bristol N2
C.Genetics:

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glucose-1-phosphate thymidylyltransferase related protein PAB2433 - C;Species: Pyrococcus abyssi C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-JC;Accession: D75080 R;anonymous, Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;She, Q; Singh, R.K.; COLLECTION, Jong, I.; Jeffries, A.C.; Kozera, C.J.; Jong, I.; Jeffries, M.A.; Sensen, C.W.; arrett, R.A.; Ragan, M.A.; Sensen, C.W.;
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A; Accession: H90281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein dppB-1 [imported] - Sulfolobus solfataricus
C;Species: Sulfolobus solfataricus
C;Date: 24-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
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A; Residues: 1-348 < KUR>
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A;Description: Sulfolobus solfataricus complete genome
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A;Introns: 47/2; 81/2; 125/3; 171/3; 214/1; 236/2; 343/3; 444/1
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23.7%;
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C;Species: Cyanea capillata
C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004
C;Accession: T43048
C;Accession: Greenberg, R.M.; Clark, K.S.; Anderson, P.A.V.
J. Biol. Chem. 273, 22792-22799, 1998
A;Title: Cloning and functional expression of a voltage-gated calcium channe A;Reference number: Z22300; MUID:98380510; PMID:9712913
A,Accession: T43048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Description: Pyrococcus abyssi genome sequence: insights into archaeal chromosome struc
A;Reference number: A75001
A;Accession: D75080
A;Status: preliminary
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                  A;Residues: 1-1911 <JEZ>
A;Residues: 1-1911 <JEZ>
A;Cross-references: UNIPROT:002038; EMBL:U93075; NID:g1947095; PID:g1947096; PIDN:AAC6305
C;Superfamily: voltage-dependent calcium channel protein alpha-1 chain
C;Keywords: transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      calcium channel alpha-1 chain - Cyanea capillata
C;Species: Cyanea capillata
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C; Superfamily:
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43; Conserv
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                                    KVI 142
                                                                                                          FLLAVFRFKVLI--LAYAV-----
                                                                                                                                                                                                                                                         PEDMENALTGSQSSHASLRNIHSINPTQLM----ARIESYEGREKKGISDV------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KKGISDVRRTFCLFVTFDL-LFVTLLWIIELNVNG------GIENTLEKEVMQYDY 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PEDIKKARKLIVYTSVKGVGDGFISRHLNRKISTRISALLVEHVTPNOM------
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                                                                      FFTAMFTFEVTVKMIAFGVILHKRSFCRSFFNQLDLVIVAVSWAAIMLSRGSATSVVRIL
                                                                                                                                            FFIFSANNKLRYLCYRLAVNKIFINSILVLIIMSSVALAAEDPIGRDVLR-NKILGYFDI
                                                                                                                                                                                 -----RRIFCLFVTFDLLFVT--LLWIIBLNVNGGIENTLEKEVMQYDYYSSYFDI 100
                                                                                                                                                                                                                       PEDVE--LGNPKSKNGTLRHMGETTSTEMSEGKEARIRPLRLSELNLLKDIPDPMPPESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YKVIPALRKVPGKRDERIFLTMLLTLVGWIKALFL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----TIVTFLFGIFSALMNFISVPIAGILYQVSSILDGVDGEIARARMQTSK 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aquifex aeolicus glucose-1-phosphate thymidylyltransferase
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                                                                                                                                                                                                                                                                                             33; Mismatches
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Pred. No. 0.59
25; Mismatches
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Pred. No. 7
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                                                                                                          ---LRHWWAIALTT-AVTSAFLLA 139
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RESULT

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A;Molecule type: DNA
A;Residues: 1-396 <PAR>
A;Gross-references: UNIPROT:Q9PME5; GE
A;Experimental source: serotype O2, st
C;Genetics:
A;Gene: moeA2; C;1519
C;Superfamily: Molybdenum cofactor mol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  probable molybdopterin biosynthesis protein Cj1519 [imported] - Campylobacter jejuni (st C;Species: Campylobacter jejuni (c;Species: Campylobacter jejuni (st C;Species: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 16-Aug-2004 (c;Accession: B81299 R;Parkhill, J.; Wren, B.W.; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; Chillin C.W.; Quail, M.; Rajandream, M.A.; Rutherford, K.M.; VanVliet, A.; Whitehead, S.; Barrel Nature 403, 665-668, 2000 A;Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveals hyph A;Accession: B81299 A;Accession: B81299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein F38E11.7 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 C;Accession: T21969
R;Matthews, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          submitted to the EMBL Data Library, January 1996
A;Reference number: Z19495
A;Accession: T21969
A;Status preliminary; translated from GB/EMBL/D
A;Molecule type: DNA
A;Residues: 1-767 <MIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:Q20170;
A;Experimental source: clone F38E11
C;Genetics:
A;Gene: CESP:F38E11.7
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A, Introns: 50/2; 118/1; 139/2; 189/3; 226/1; 248/1; 287/2; 375/2; 432/3; 465/3;
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Best Local S
Matches 35
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                    moeA2; Cj1519
family: Molybdenum cofactor molybdenum incorporation protein
                                                                101 FLLAV--FRFKVLILAYAVCR--LRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVL 156
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                                                                                                                                                                                                      LGEALENPAQIRSSNHIAIANL-----
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                       FIIALPGFPYSAMVMFNLYTREILNSW-
                                                                                                             ATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIAKANEK
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                                                                                                                                                                                                                                                                                                                 7.2%; Score 85.5; DB 2;
21.0%; Pred. No. 3.1;
                                                                                                                                                                                                                                                                                                35; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         GB;AL139078; GB;AL111168; NID:g6968723; PIDN:CAB7393 strain NCTC 11168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL: Z68342; PIDN: CAA92775.1; GSPDB: GN00022; CESP: F3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---AIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPI 158
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                                                                                                                                                                                                                                                                                                81;
                       -LLQPKDYICKAFLQGSYKKKT
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C;Species: Bo:
C;Date: 13-Fel
C;Accession: (
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C;Date: 10-Nov-1995 †
C;Accession: A57219
R;Lerner, T.J.; Boust
                                                                                                                                                                                                                                                                                                                                                                                                        Nature 390, 580-586, 177,
A;Authors: Smith, H.O.; Venter, J.C.
A;Title: Genomic sequence of a Lyme disease spirochaete,
A;Title: Genomic sequence of a Lyme disease s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Fraser, C.M.; Casjens, S.; Huang, W.M.; Sutton, G.G.; Clayton, R.; Lathigra, R.; White, son, D.; Peterson, J.; Kerlavage, A.R.; Quackenbush, J.; Salzberg, S.; Hanson, M.; Vugt, Bowman, C.; Garland, S.; Fujii, C.; Cotton, M.D.; Horst, K.; Roberts, K.; Hatch, B.
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A;Map position: 16pl2.1-16pl1.2
C;Superfamilly: CLM3 protein/Battenin/Batten disease protein/BTN1 protein
C;Keywords: membrane protein
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C;Genetics:
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A;Title: Isolation of a novel gene underlying Batten disease,
A;Reference number: A57219; MUID:96016090; PMID:7553855
A;Accession: A57219
                                                                                                                                                                                                                                     A;Cross-references: UNIPROT:051531; GB:AE001160; A;Experimental source: strain B31
                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-448 < KLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            conserved hypothetical integral membrane protein BB0584 - Lyme disease spirochete C;Species: Borrelia burgdorferi (Lyme disease spirochete)
C;Date: 13-Feb-1998 #sequence_revision 13-Feb-1998 #text_change 09-Jul-2004
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A; Residues: 1-438 < LER>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;Species: Homo sapiens (man)
;Date: 10-Nov-1995 #sequence_revision 10-Nov-1995 #text_change 16-Aug-2004
                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   277 VFKGLLWYIVPLVVVYFAEYFINQGLFELLFFWNTSLSHAQQYRWYQM---LYQAGVFAS
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                                                                               l Similarity
47; Conserv
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DVRRTECLEVTEDLLEVTL----LWIIELNVNGGIE-NTLEKEVMQYDYYSS-----Y
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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25.5%;
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                                                                                   28;
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                                                                                                                  Score 85;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 85.5; DI Pred. No. 3.5;
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                                                                                   Mismatches
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                                                                                                                                                                                                                                                                             GB:AE000783;
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271 DTHKYAAYSISFSIYFIIFNIIHSFCISLNIMMGYEMHNSKKEIMKVAIYLSKIGLKLAF

330

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probable integral membrane protein [imported] - Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Species: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 09-Jul-2004 C;Accession: H97002 R,Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, K.S.; Zeng, Q.; Gibson, R.; L.; Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R. J. Bacteriol. 183, 4823-4838, 2001
A;Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium A;Reference number: A96900; MUID:21359325; PMID:21359325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
H97002
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                                                                                                                                                                         A.Status: preliminary
A,Molecule type: DNA
A,Residues: 1-352 <KUR>
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C;Species: Cricetulus griseus (Chinese hamster)
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 06-Oct-2000
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A; Residues: 1-471 < KUG>
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                                                                                                                                Cross-references: UNIPROT:Q97KT1; GB:AE001437; PIDN:AAK78811.1; PID:g15023727; GSPDB:
Experimental source: Clostridium acetobutylicum ATCC824
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Best Local :
                    Local
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    38;
                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ILAWIETWFLD 172
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FCLFVTFDLLFVTLLWIIELNVNGGIENTLEKEVMQY------DYYSSYFDIFLLAV 105
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    Conservative
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7.0%; Score 83.5; Di
19.2%; Pred. No. 4.1;
tive 35; Mismatches
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A;Molecule type: DNA
A;Residues: 1-291 <KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Parkhill, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barre Nature 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sugar ABC transporter, permease protein YPO2476 [imported] - Yersinia pestis C;Species: Yersinia pestis C;Species: Yersinia pestis C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004 C;Accession: AE0302
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AE0302
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C;Superfamily: inner membrane protein ugpA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
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                                                                                                                                                                                                                                                                        46 KGISDVRRTFCLFVTFDLLFVTLLWIIELNVN----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38
                                                                                                                                                        69 MLNVMRFLMY--YLPIVFISSFLF----AFGLQKLKHG-----RTFVALSFLLANVSSG 116
                                                                                                                                                                                                                                                                                                               44;
                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                           VAYSIVFSKIFSQNGPLNTFLYDWFGFTLPWLTSPDFAMLSIALVVTWKFVGYYGLILFS 176
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  GLNSIPKEIYSAAELDN
                                    DFKVLPQE----ABBEN 184
                                                                                                                  ----FILSKLFSQGA------FGYVLPIIS-----FILAWIETW------FL
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LILSLVGGTFINYKIMPE
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                                                                                                                                                                                                                                    KQVGSVLAASYLGYTSIFWFYPFIWLAVLSLTEWRFVGIPTFNGLNNFILVMQDPLFWKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ESYEGREKKGISDVRRTFCLFVTFD-----
                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                          6.9%; pred. No. ...
22.3%; pred. No. ...
--ive 26; Mismatches
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                                                                                                                                                                                                                                                                                                                                   DB 2;
3.7;
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                                                                                                                                                                                                                                                                            ----GGIENTL---
                                                                                                                                                                                                                                                                                                                                                      Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ntice, M.B.;
bugan, G.; I
Barrell, I
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NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Crithidia oncopelti mitochondrior C;Species: mitochondrion Crithidia oncopelti C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 C;Accession: S34960 R;Maslov, D.A.; Horvath, A.; Gwang II, K.; Kolesnikov. A.A.

RESULT 13

A;Molecule type: DNA A;Residues: 1-590 <MAS> A;Cross-references: UNIPROT:Q34192; EMBL:X56015; NID:g12879; PIDN:CAA39492.1; PID:g12882 C;Genetics:

A; Reference number: A; Accession: S34960

R;Maslov, D.A.; Horvath, A.; Gwang II, K.; Kolesnikov, submitted to the EMBL Data Library, October 1990 A;Reference number: S34958

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A;Gene: ND5.
A;Genome: mitochondrion
A;Genome: mitochondrion
A;Genome: mitochondrion
A;Generic code: SGC6
C;Superfamily: NADH dehydrogenase (ubiquinone) chain 5
C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation;
C.A.; Venter, J.C.; Science 270, 397-403, 1995
Science 270, 397-403, 1995
A;Title: The minimal gene complement of Mycoplasma genitalium.
A;Reference number: A64200; MUID:96026346; PMID:7569993
A;Accession: C64227
A;Status: preliminary; nucleic acid sequence not shown; translation
A;Molecule type: DNA
                                                                                                                                                                hypothetical protein homolog MG247 - Mycoplasma genitalium C;Speciles: Mycoplasma genitalium C;Speciles: Mycoplasma genitalium C;Speciles: Mycoplasma genitalium C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 C;Accession: C64227 R;Praser; C.M.; Gocayne, J.D.; White, O.; Adams, M.D.; Clayton, R.A.; Fleischmann, M.; Puhrmann, J.; Nguyen, D.; Utterback, T.R.; Saudek, D.M.; Phillips, C.A.; Merri, C.A.; Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Finlay, B.B.; Paranchych, W.
J. Bacteriol. 166, 713-721, 1986
A;Title: Nucleotide sequence of the surface exclusion genes traS and traT from the IncF-A;Reference number: A29835; MUID:86223783; PMID:3011738
A;Accession: B29835
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C;Species: Escherichia coli
C;Species: Escherichia coli
C;Date: 04-Aug-1988 #sequence_revision 04-Aug-1988 #text_change 09-Jul-2004
C;Accession: B29835
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A, Molecule type: DNA
A, Residues: 1-186 < FIN>
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C;Genetics:
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Best Local S
Matches 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 6.9%; Score 82.5; DB 2; Length 186; Best Local Similarity 23.8%; Pred. No. 2.4; Matches 31; Conservative 24; Mismatches 40; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14
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144 GPSWPVTYLI 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166 IETWFLDFKV 175
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                147 SF--FLISY-----FWYRFFALKFGFKSFFISKI------GDVLLLLSFVMTFI 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   107 REKVLILAYAVCRIRHWWAIALTTAVTSAFILAKVILSKIESQGAEGYVIPIISEILAWI 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   116 AVCRIRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPII------SFILAW 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95 FILFYAFYYMYYDLMLKRFFNIFWWFVLCMNFFI-----LSYDYLTAYCGWELLGLF 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88 NIVSIK----ISIGSEITEQSVILKIVERKINSYGQFLMVVNAIVGCVILSSGERFVAGI 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 FDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLL-----AVFRFKVLILAY 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55 FCLEVTE-----DLL---FVTLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35;
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A;Residues: 1-239 <TIGR>
A;Cross-references: UNIPROT:P47489; GB:U39703; GB:L43967; NID:g3844835; PIDN:AAC71467.1;
A;Experimental source: strain G-37
C;Genetics:
A;Genetic code: SGC3
C;Superfamily: Escherichia coli ygiH protein
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Best Local 9
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159 VSLASLITF---
                              136 FLLAKVILSKLFSQGAFGYVLPIISFILAWIE 167
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                                                                                               93 YYSSYFDIFLLAV-----FRFK----VLILAYAVCRLRHWWAI-----ALTTAVTSA 135
                                                                                                                              42 GSKNPGATNSMRVFGLKIGFLVAIFDAFKGFFAFLLTWIL---FRFGLQGYLTEKVYQST
                                                                                                                                                                                              33;
                                                                                                                                                                                                              Similarity
                                                                YFLSYLSCFAATIGHIFPLYFKFKGGKAIATTGGSLLAISLWWFLICLLIWIMITLITKY 158
                                                                                                                                                                                                Conservative
                                                                                                                                                                                                              6.9%;
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 FVLAVI-ILIPWLD
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Pred. No. 3.3;
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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PRO polypeptide sequen
                                                                                                                                                                                                 ABG95857 standard; protein; 234 AA. Human secreted/transmembrane protein US2002119130-A1.
                                                                                  ABB84847 standard; protein; 234 AA. Human PRO1864 protein sequence SEQ WO200200690-A2.
ABB95453 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200168848-A2.
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8: geneseq20048:*
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derived by analysis of the total score distribution.
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US2003027272-A1.
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US2003032112-A1.
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ABU89859 standard;
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GODDWSKI P.
GODOWSKI P.
GURNEY A L.
HILLAN K J.
MARSTERS S A.
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protein PRO1864.

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06-MAR-2003.
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Human secreted/transmembrane protein
US200304923-A1.
06-MAR-2003.
        ABU97985 standard; protein; 234 AA. Novel human secreted and transmembrane US2003017544-A1.
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Human PRO polypeptide #33.
US2003036140-A1.
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US2003036141-A1.
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Human secreted polypeptide I
US2003040063-A1.
27-FEB-2003.
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Human secreted/transmembrane
US2003009013-A1.
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Human secreted polypeptide PRO1864,
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US2003036160-A1.
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US2003013855-A1.
        ABU71512 standard; protein;
Human secreted polypeptide I
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Human secreted/transmembrane protei
                                                                                                                                 27-FEB-2003.
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US2003032117-A1.
                                                                  ABU95241 standard; protein; 234 AA. Novel human secreted and transmembrane US2003036117-A1.
Human PRO1864 protein. US2003036143-A1. 20-FEB-2003.
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Human PRO polypeptide #33.
US2003008353-A1.
Human secreted p
US2003027268-A1.
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Human secreted polypeptide US2003036132-A1.
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Human secreted/transmembrane protein
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Human PRO polypeptide #33.
US2003022295-A1
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US2003027263-A1.
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Human secreted polypeptide I
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Human secreted/transmembrane
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Human secreted/transmembrane
US2003045684-A1.
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Human secreted polypeptide PRO1864,
US2003040058-A1.
27-FEB-2003.
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US2003032104-A1.
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Human secreted poly
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RESULT 107
ID ABU86530 standard; p
DE Human secreted/trans
PN US2003032129-A1.
PD 13-FEB-2003.
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RESULT 106
ID ABU79201 standard; p
DE Human PRO polypeptid
PN US2003032106-A1.
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ID ABR703
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US2003022301-A1.
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US2003032107-A1.
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US2003032103-A1.
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                       Human secreted poly US2003027262-A1.
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                                         ABR64581 standard;
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US2003040069-A1.
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ABU91386 standard; protein;
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US2003023042-A1.
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Human secreted polypeptide |
US2003054455-A1.
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Human secreted polypeptide I
US2003054479-A1.
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RESULT 161
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RESULT 157
ID ABM24758 standard; F
DE Human secreted polyF
PN US2003104539-A1.
PD 05-JUN-2003.
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ID ADA778
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RESULT 163
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Human secreted polypeptide PRO1864,
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Human secreted/transmembrane
US2003065159-A1.
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       ABO03331 standard; protein; 'Human secreted/transmembrane US2003036127-A1.
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US2003104543-A1.
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Human secreted polypeptide I
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ABR93417 standard; protein;
Human secreted polypeptide I
US2003054478-A1.
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Human secreted polypeptide PRO1864,
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Human secreted/transmembrane
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US2003054468-A1.
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Human secreted/transmembrane US2003068776-A1.
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Human secreted/transmembrane
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US2003068727-A1.
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RESULT 218
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                    Human secreted polypeptide PRO1864, US2003049778-A1.
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13-MAR-2003.
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Human secreted/transmembrane
US2003032134-A1.
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Human PRO polypeptide #33.
US2003049768-A1.
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Human secreted polypeptide |
US2003104555-A1.
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Human secreted polypeptide PRO1864,
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(GETH ) GENENTECH INC.
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10-APR-2003.
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Human secreted polypeptide
US2003068740-A1.
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Human secreted polypeptide PRO1864,
US2003068692-A1.
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                                                  ABO40704 standard; protein; 234 AA. Human secreted/transmembrane protei
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide PRO1864,
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Best Local Similarity
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PN US2003087374-A1.
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Human secreted/transmembrane
US2003040074-A1.
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Human secreted/transmembrane
US2003036164-A1.
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US2003049773-A1.
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Human secreted poly
US2003073179-A1.
Human secreted p
US2003049740-A1.
13-MAR-2003.
               ABR80544 standard; protein; 234 AA. Human secreted polypeptide PRO1864,
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Human secreted poly
US2003054480-A1.
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US2003040055-A1.
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RESULT 239
ID ABMO1155 standard; p
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PD 13-MAR-2003.
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US2003064457-A1.
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US2003068773-A1.
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10-APR-2003.
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US2003073185-A1.
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US2003087373-A1.
08-MAY-2003.
                                                               ABM29638 standard; protein; 234 AA. Human secreted polypeptide PRO1864, US2003064456-A1.
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Human secreted polypeptide F
US2003064448-A1.
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US2003054458-A1.
20-MAR-2003.
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Human secreted polypeptide PRO1864,
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US2003096353-A1.
22-MAY-2003.
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Human secreted/transmembrane US2003068693-A1.
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ABO29062 standard;
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Human secreted polypeptide I
US2003068735-A1.
                                ABM34029 standard; protein;
Human secreted polypeptide F
US2003096359-A1.
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Human secreted polypeptide F
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US2003082715-A1.
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Human secreted polypeptide PRO1864,
US2003068742-A1.
10-APR-2003.
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US2003073182-A1.
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ABO16602 standard; protein; 234 AA. Human secreted/transmembrane protein US2003027276-A1.
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Human secreted/transmembrane
US2003069767-A1.
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US2003049744-A1.
13-MAR-2003.
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US2003054461-Al.
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                                                     ABM13714 standard; protein;
Human secreted polypeptide I
US2003064458-Al.
03-APR-2003.
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US2003032121-A1.
13-FEB-2003.
                                                                                                                                                                             ABR89672 standard; protein; 234 AA.
Human secreted polypeptide PRO1864,
US2003073171-A1.
17-APR-2003.
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Human PRO polypeptide #33.
 ABO28452 standard; protein; 2
Human secreted/transmembrane
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RESULT 304
ID AB047760 standard; p
DE Human secreted/trans
PN US2003049747-A1.
PD 13-MAR-2003.
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RESULT 296
ID ABO30282 standard, p
DE Human secreted/transp
N US2003064464-A1.
PD 03-APR-2003.
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 ABO47760 standard; protein; 234 AA.
Human secreted/transmembrane protein (PRO)
US200304947-A1.
13-MAR-2003.
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Human secreted polypeptide
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Human PRO polypeptide #33.
US2003068738-A1.
10-APR-2003.
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US2003044918-A1.
06-MAR-2003.
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Human PRO polypeptide #33.
US2003049767-A1.
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Human secreted/transmembrane
US2003049750-A1.
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20-MAR-2003.
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ID ABM75444 standard; p
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Human secreted polypeptide PRO1864,
     ABM25368 standard; protein;
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Human secreted/transmembrane protein
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Human secreted polypeptide
US2003068696-A1.
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US2003049762-A1.
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Human secreted/transmembrane
US2003040053-A1.
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Human PRO polypeptide #33.
US2003049765-A1.
ABR73350 standard; protein;
Human secreted polypeptide :
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                                         ABM11274 standard; protein;
Human secreted polypeptide F
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide PR01864,
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US2003064453-A1.
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Human secreted polypeptide |
US2003068698-A1.
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Human secreted/transmembrane
US2003064466-A1.
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Human secreted polypeptide PRO1864,
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US2003068720-A1.
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Human secreted/transmembrane
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US2003040073-A1.
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                                                             Human secreted polypeptide E US2003073176-A1.
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Human secreted polypeptide I
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ID ABR89977 standard; p
DE Human secreted polyp
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RESULT 418
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                                      Human secreted/transmembrane US2003068731-A1.
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US2003073177-A1.
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Human secreted polypeptide
US2003064450-A1.
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Human secreted polypeptide P
US2003049764-A1.
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Human secreted polypeptide E
US2003054457-A1.
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ID ABM33724 standard;
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ABR85097 standard; protein; 234 AA. Human secreted polypeptide PRO1864, US2003040065-A1.
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Human secreted poly
US2003104556-A1.
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US2003068754-Al.
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Human secreted polypeptide PRO1864,
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                                                                         US2003036121-A1.
                                                                                            ABO15382 standard;
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Human secreted polypeptide
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Human secreted polypeptide PRO1864,
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RESULT 455
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DE Human secreted polyp
PN US2003068771-A1.
PD 10-APR-2003.
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US2003068761-A1.
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Human secreted poly
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Mammalian PRO polypeptide (SeqID 14).
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(GETH ) GENENTECH INC.
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Novel human secreted and transmembrane
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                                 Human secreted/transmembrane
                                           ADD37104 standard;
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                                      ADH24046 standard; protein; 234 AA.
Novel human secreted and transmembrane
US2003180918-A1.
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US2003207392-A1.
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US2003180904-A1.
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25-SEP-2003.
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US2003181668-A1.
25-SRD-200
ADI01956 standard; protein; 234 AA. Novel human secreted and transmembrane US2003181652-A1.
25-SBP-2003.
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(GETH ) GENENTECH INC.
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US2003181678-A1.
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Human PRO polypeptide #7.
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US2003171550-A1.
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US2003130483-A1.
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US2003180852-A1.
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Novel human secreted and transmembrane protein PRO1864. US2003180854-Al.
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Human PRO polypeptide #33.
US2003215910-A1.
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                                                                                          ADG85450 standard; protein; 234 AA. Novel human secreted and transmembrane
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Human PRO polypeptide #7.
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Human PRO polypeptide #7.
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Human PRO polypeptide #33.
US2004023321-A1.
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US2003187247-**
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                                                Novel human secreted and transmembrane US2004048334-A1.
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Human PRO polypeptide #33.
US2004038337-A1.
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Human PRO polypeptide #31.
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                                                               ABR58404 standard;
Human NOV19b.
WO2003029423-A2.
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US2004091959-A1.
AAM39930 standard; protein;
Human polypeptide SEQ ID NO
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WO200153312-A1.
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WO9706256-A2.
20-FEB-1997.
(INRM ) INST NAT SANTE & RECH ME (CNRS ) CENT NAT RECH SCI.
(UYPA-) UNIV PASTEUR LOUIS.
(BRIM ) BRISTOL-MYERS SQUIBB CO.
                                                                                                                                                                                                                                                                                                                                     Human protein encoded by clone FEBRA20007820. EP1308459-A2.
                         EP1365034-A2.
26-NOV-2003.
                                        ADH13184 standard; protein; 445 AA.
Human malignant neoplasia-related p
                                                                                                   Breast cancer as WO2003004989-A2.
                                                                                                                                                                                                                                                              ADK36828 standard; protein; 146 AA. Novel human polypeptide SeqID8910.
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WO200179449-A2.
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10-APR-2003.
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No. 2.6e-82;
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4.1e-120;
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.4e-107;
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RESULT 636
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RESULT 635
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RESULT 632
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Putative P. abyssi I
FR2792651-A1.
27-OCT-2000.
                        Streptococcus polypeptide SEQ ID NO 8640.
WO200234771-A2.
                                                                                                                    Streptococcus polypeptide SEQ ID NO 9810. WO200234771-A2. 02-MAY-2002.
                                                                                                                                                                                                                                                                                                                                                                                                          AAM90384 standard; protein; Human immune/haematopoietic W0200157182-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB59968 standard; protein; 580 AA. Drosophila melanogaster polypeptide W0200171042-A2.
                                                                                               (CHIR-) CHIRON SPA.

(GENO-) INST GENOMIC RES.
                                                                                                                                                     ABP30317 standard;
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                                                                                                                                                                                                                                           AAU03699 standard;
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(IFRE-) IFREMER INST RECH EXPL MER.
7.8%; Score 93.5;
t Local Similarity 21.9%; Pred. No. 0.
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Human CGDD-22 prot
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                                                                                                                                                                                                (MICR-) MICROBIAL
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CHIRON SPA.
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polypeptide
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nucleoside-diphosphate-sugar
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Query Match
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RESULT 638
ID ABP26469
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PD 02-MAY-20
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Best Local :
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                           Human myocardial infarction-associated W02004058052-A2.
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WO200234771-A2.
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WO2004058052-A2.
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WO2004058052-A2.
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PL-) APPLERA CORP.
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polypeptide SEQ ID
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infarction-associated
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                            Batten disease CLN3
WO9708308-A1.
06-MAR-1997.
                                                                                                                        AAW13575 standard; protein;
Batten disease polypeptide
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Protein encoded by Prokaryotic
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WO2003051902-A1.
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           (GEHO ) GEN HOSPITAL (UYLE-) RIJKSUNIV LEI
                                                                                       (UYLE-) GEN HOSPITAL CORI
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                                                       AAW13589 standard;
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.74;
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.71;
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RESULT
ID AL
DE Hu
PN WC
PD 10
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06-MAR-1997.
(GEHO ) GEN HOSPITAL CORF.
(UYLE-) RIJKSUNIV LEIDEN.
7.2%; 5
                                                                                                                                                                                                                                     Human NOV43a protein SEQ ID W02003029424-A2.
                                                                                                                                                                                                                                                                                                                                                         ADQ96392 standard; T cell activation a WO2004058805-A2.
                                                                                                                                                                                          ADN63244 standard; protein;
Human NOV43a variant.
                                                                                                                                                                                                                                                                                                 Human myocardial WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                         L5-JUL-2004.
(ASAH-) ASAHI KASEI PHARMA CORP.

ry Match
7.2%; Score
7.2%; Pred.
                                                                                                                                                                                                                                                                                                               ADQ39268 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                              Batten disease CLN3
(SHEN/
              (ANDE/
(ZHON/
(CATT/
(JIWW/
(MILL/
(MILL/
(RAST/
(STON/
                                                                            (MALY/
(ORTT/
(GORM/
                                                                                                                                                                                   US2004038223-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW13577 standard;
                                                                                                                                                                                                                              (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                    5-JUL-2004.
APPL-) APPLERA CORP.
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                                                                      ZERH
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L/) MILLET I.
M/) PEYMAN J A.
U/) KEKUDA R.
J/) JU J.
L/) LI L.
L/) LI L.
L/) GUO X.
CATTERTON E.
JI W.
MILLER C B.
RASTELLI L.
STONE D J.
PENA C E A.
SHENOY S G.
SHIMKETS R A
                                                       ZERHUSEN B
ANDERSON D
ZHONG M.
                                                                                                      PATTURAJAN M.
SPYTEK K A.
EDINGER S R.
                                                                                    ORT
                                                                                          MALYANKAR U M.
                                                                            GORMAN L.
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3 mutant prote
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25.5%;
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d protein
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NO:182
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5.1.1;
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1.1;
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(GBb.
(UYLE-).
Query Match
Best Local S'
RESULT 664
ID ABB96
DE Huma'
PN WO'
PD 2'
PA
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(SPAD/)
Query Match
Best Local
RESULT 6
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Best Local S
RESULT 662
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(MILL/) MILLET I.
(PEYM/) PEYMAN J A.
(KEKU/) KEKUDA R.
(JUJJ/) JU J.
(LILL/) LI L.
ADQ18055 standard; protein; 473 Human soft tissue sarcoma-upreguWO2004048938-A2.
                                                                                                                                  ABB89640 standard;
Human polypeptide
WO200190304-A2.
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WO9708308-A1.
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(SPAD/)
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(DIPI/)
(EISE/)
(GANG/)
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Batten disease CLN3 mutant p
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(JIWW/
(MILL/
(RAST/
                                                                                                  (HUMA-) HUMAN
                                                                 Local Similarity
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) GANGOLLI E A.
) RIEGER D K.
) SPADERNA S K.
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) GANGOLLI E !
) RIEGER D K.
) SPADERNA S !
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BERGHS C.
DIPIPPO V A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MILLER C E.
RASTELLI L.
STONE D J.
PENA C E A.
SHENOY S G.
SHIMKETS R A.
ROTHENBERG M I
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ZERHUSEN B I
ANDERSON D I
ZHONG M.
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BERGHS C.
DIPIPPO V A.
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LEACH M D.
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MALYANKAR U
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                                                                                                                                                  ; protein; SEQ ID NO
                 sarcoma-upregulated
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(HYSE-) h
Query Match
Best Local
RESULT 6"
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Best Local Similarity
RESULT 666

ID ABU40544 standard; p
DE Protein encoded by P:
PN W0200277183 A2.
PD 03-OCT-2002.
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RESULT
ID AB
DB Pr
PN WO
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Best Local Similarity
RESULT 672
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Best Local :
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W0200277183-A2.

03-OCT-2002.

(ELIT-) ELITRA PHARM INC.

(ELIT-) ELITRA PHARM 7.2%; §
                                                                                                                                                                                                                  Protein encoded by Pro
WO200277183-A2.
03-OCT-2002.
(ELIT-) ELITRA PHARM 1
                                                                                                                                                                                                                                                                                                          Novel human diagnostic protein #21276.
WO200175067-A2.
                                                                                                                                                                                                                                                                                                                                                                        Arabidopsis thaliana protein EP1033405-A2. 06-SEP-2000.
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AAW13586 standard; protein; Batten disease CLN3 mutant pw09708308-A1.
                                                                                ADB85263 standard; protein;
Mouse RNA1 homologue SEQ ID
                                                                                                                                                                    AAW13590 standard; protein;
Batten disease CLN3 mutant [
                                                                                                                                                                                                                                               ABU35608 standard;
Protein encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Batten disease CLN3 mutant WO9708308-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABU33210 standard;
Protein encoded by
                                                                                                                                                           Batten disease CLN3
WO9708308-A1
                                                                                                                                                                                                                                                                                                                                                                                                    AAG16921 standard; protein;
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                                                                                                                               (GEHO ) GEN HOSPITAL CORP.
(UYLE-) RIJKSUNIV LEIDEN
                                                                                                                                                                                                                                                                                           .1-OCT-2001.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                        (GEHO ) GEN HOSPITAL CORE
(UYLE-) RIJKSUNIV LEIDEN.
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                                                      9-FEB-2003.
WARN ) WARNER LAMBERT
                                                                                                             Local Similarity
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Prokaryotic e
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Prokaryotic essu
                                   19.5%;
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33.7%;
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25.5%;
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24.8%;
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20.1%;
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Score 85.5
Pred. No.
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NO:144.
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n fragment
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Pred. No.
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Pred. No. 2;
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1.2;
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Query Match
Best Local Similarity
RESULT 680
                                                 Best Local Similarity RESULT 682.
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Best Local Similarity
RESULT 681
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RESULT 676
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RESULT 679
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Human MDDT protein .
WO2003046152-A2.
05-JUN-2003.
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(CAOY/) CAO Y.
(HINK/) HINKLE G
(SLAT/) SLATER S (CHEN/) CHEN X.
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ery Match
st Local Similarity 22.6%;
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Local Similarity 22.6%;
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(GEHO) GEN HOSPITAL CORP.
(UYLE-) RIJKSUNIV LEIDEN.
EV MATCh '.'
                        Klebsiella pn
US6610836-B1.
                                         ABO63194 standard;
                                                                          06-SEP-2000.
                                                                                 Arabidopsis thaliana EP1033405-A2.
                                                                                                 AAG53746 standard;
                                                                                                                                    06-SEP-2000.
                                                                                                                                          Arabidopsis thaliana EP1033405-A2.
                                                                                                                                                           AAG25639 standard;
                                                                                                                                                                                                                       AAG53771 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human protein sequence EP1074617-A2.
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Human protein sequence SEQ
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(SLAT/) SLATER S
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                                                                                                Human protein of the invention S EP1347046-A1.
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Human polypeptide s
WO200153312-A1.
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                                  WO200153312-A1.
                                                                                  (REAS-) RES ASSOC BIOTECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADD43870 standard; protein; 536 AA. Chlamydia trachomatis immunogenic protein,
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Protein encoded by
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                                                                                                                                                                                                                                                                                                                                                                                            ADC42920 standard; protein;
Vaccinia Virus Major Core pı
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WO200177335-A2.
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ry Match 6.7%;
t Local Similarity 19.0%;
                                                                                                                                                        (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                          (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                        ABB92830 standard; protein; 1780 AA.
Herbicidally active polypeptide SEQ
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Similarity
                 HYSEQ INC
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                                          ; protein;
SEQ ID NO
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Prokaryotic essential
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protein P4a
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                                                                                                                                   18-AUG-1994.
18-AUG-1994.
(WIST-) WISTAR INST ANATOMY & 6.7%; Sery Match 6.7%; S
                          ABB58483 standard; protein; Drosophila melanogaster poly WC200171042-A2.
                                                                                                            AAW27275 standard; protein; 406 AA.
Human cytomegalovirus immediate-early
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Molasses toxicity
WO9514774-A2.
                                                                                                                                                                                     AAR58703 standard; protein;
HCMV IE-exon-4 subunit.
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18-OCT-2001.
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                  27-SEP-20
                                                               (WIST-) WISTAR INST ANATOMY & BIOLOGY.
ry Match 6.7%; Score 79.5;
t Local Similarity 19.3%; Pred. No. 4
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                                 Human genome derived single US2003194704-A1.
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                                                                                                                                                                                                                ABU62069 standard; protein; 1597 AA.
Human heart alpha-kinase (HK).
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Human 59590 protein #SEQ ID 110.
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ry Match 6.6%; Score
t Local Similarity 24.3%; Pred.
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Human cancer related protein SEQ ID NO:267.
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ry Match 6.7%;
t Local Similarity 18.0%;
                                                                                                                       JS2002177205-Aī.
                                                                                                                                Mouse heart alpha-kinase (HK)
                                                                                                                                           ABU62070 standard;
                                                                                                                                                                                 (RYAZ/) RYAZANOV A.
                                                                                                                                                                                                                                                                             L4-AUG-2003.
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Human diagnostic and therapeutic
WO2004023973-A2.
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Human TRICH-6, SEQ
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Human diagnostic WO2004023973-A2.
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                                                                             ABB98345 standard; protein;
Human ABC transporter ABCB9
                                                                                                                                         AAG79246 standard; protein; 766 AA. Amino acid sequence of a human TAP-like WO200173018-A2.
AAE21170 standard; protein;
Human TRICH-14 protein.
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(UYGE-) UNIV GENT.
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                                                    (ACTI-) ACTIVE PASS
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                                                                                                                                                                                              (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                 AAG67163 standard;
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                                                                                                                   ABG17374 standard; protein; Novel human diagnostic prote WC200175067-A2.
                                                 Polypeptide encoded W02003023013-A2.
                                                                 ABO00771 standard;
                                                                                                                                                                       Listeria monocytogenes protein #1743.
WO200177335-A2.
18-OCT-2001.
(INSP ) INST PASTEUR.
                                                                                                                                                                                                                                                                                                                            ABU30411 standard;
Protein encoded by
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EP1033405-A2.
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Haemophilus influenzae cellular
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                                 (HYSE-) HYSEQ
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Arabidopsis thaliana proteir
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(GEHO ) GEN HOSPITAL CORP.
(UYLE-) RIJKSUNIV LEIDEN.
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Mouse Batten disease polypeptide
W09708308-A1.
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Mouse melatonin la
US6326526-B1.
      Hyperthermophile WO2003076575-A2.
              ADM25403 standard; protein; 383 AA
Hyperthermophile Methanopyrus kand
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Mouse GPCR MTNR1A;
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Mouse melatonin la receptor.
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SEQ ID NO:655.
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EP1033405-A2.
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Arabidopsis thaliana protei
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Query Match
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ID ADF74969 standard; p
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PN W02003097686-A1.
PD 27-NOV-2003.
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(GENO-) GENOME THERAPEUTICS (
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ery Match 6.4%;
21.8%;
                        ADF74969 standard; protein;
Human 164-1b protein (SeqID
WO2003097686-A1.
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Arabidopsis thaliana
EP1033405-A2.
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Human 164-1h protein (SeqID
WO2003097686-A1.
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EP518313-A2.
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                                                                                                  ABO65827 standard; protein; 435 AA.
Klebsiella pneumoniae polypeptide s
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                                                                                                                                                                                                                                                                                                                                                                                                                                AAG42380 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Arabidopsis thaliana
                                                                                                                                                                    Enterohaemorragic E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAG42381 standard;
                                                                                                                                           (UYTS-) UNIV TSUKUBA.
                                                                                                                                                            JP2002355074-A.
                                                                                                                                                                                                                                                                           (MITU ) MITSUBISHI KASEI CORP.
                                                                                                                                                                                                                                                                                                              AAR29527 standard;
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         CHEM
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E. coli 0157:H7-specific protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein;
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Best Local Similarity
RESULT 765
ID AAR90765 standard; p
DE Human K+ channel 2 m
PN W09603415-A1.
PD 08-FEB-1996.
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RESULT
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Best Local Similarity
RESULT 773
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RESULT 766
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Human cytoskeleton-associated protein (CSAP)-3 WO200242330-A2.
                                                                                                         ADB63857 standard; protein; 555 AA. Human protein encoded by clone ASTR020053430 BP1308459-A2.
                                                                                                                                                                                          ADP25065 standard; protein; 526 AA. PRO polypeptide SEQ ID NO:2243. WO2004041170-A2.
                                                                                                                                                                                                                                                                           ADQ07984 standard;
Human hypothetical
WO2004061123-A2.
                                                                           (HELI-) HELIX RES
(REAS-) RES ASSOC
                                                                                                                                                                                                                                                                                                                                                             Helicobacter pylori
WO9640893-A1.
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(WHIT/) WHITE O
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(HUMA-) HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW42996 standard; protein; 494 AA. Putative mature potassium channel 2
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(HUMA-) HUM
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US2003092895-A1.
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Human potassium channel subunit
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BIOTECHNOLOGY
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i cytoplasmic
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annel 2 protein.
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protein FLJ20371-encoding
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ery Match 6.4%;

it Local Similarity 23.3%;
                                                                                                                                                                                                                                                                                    Arabidopsis thaliana EP1033405-A2. 06-SEP-2000.
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Enterococcus faecalis
US6617156-B1.
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WO9640893-A1.
ABB89424 standard; protein; 456 AA.
Human polypeptide SEQ ID NO 1800.
                                                                                                                            15-JUL-2004.
(ASAH-) ASAHI KASEI PHARMA CORP.
                                                                                                                                                                         ADQ96244 standard;
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                                                                                                                                                                                                                                   Arabidopsis thaliana
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Bacterial polypeptide #3779.
US2003233675-A1.
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                                                (ASAH-) ASAHI KASEI PHARMA CORP.
                                                                       WO2004058805-A2.
                                                                                          ADQ96246 standard;
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                                                                                                                                                                                                                                            AAG09591 standard;
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CY Match 6.4%; Score 76.

Local Similarity 22.6%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DN46225 standard;
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                                                                               cell activation
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kodakaraensis KOD1 protein
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                                                                                                                                                                                                                                    protein; 287 AA.
1a protein fragment
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lis polypeptide #
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22.0%;
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26.7%;
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19.2%;
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Best Local Similarity RESULT 789
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(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                                                ADM92206 standard; protein; 263 AA. S pneumoniae antigenic protein sequence WO2004020609-A2.
                                                                                                                                                                                                                                                    ABB63150 standard; protein; 228 AA. Drosophila melanogaster polypeptide W0200171042-A2.
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PRY MATCH 6.4%; Score 76;
Local Similarity 21.4%; Pred. No.
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Streptococcus pneumoniae WO200006737-A2.
                                                                                                                                                                            ADK46633 standard; protein; 263 AA.
Streptococcus pneumoniae protein, Seq
                                                                                                                                                                                                                                  (PEKE )
                                                                                                                                                                                                                                                                                                                                                                                ADN23383 standard; protein; 1917
Bacterial polypeptide #6036.
US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADN22849 standard; protein; 1402 AA
Bacterial polypeptide #5502.
US2003233675-Al
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(HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200190304-A2
                  AAY81619 standard; protein;
                                                                                                                                                                   US6699703-B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY44945 standard; protein;
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                                                             (TUFT ) UNIV TUFTS.
                                                                       L1-MAR-2004
                                                                                                                                                                                                                                                                                                                                      (HINK/) HINKLE G
(SLAT/) SLATER S
                                                                                                                                                                                                                                                                                                                              (CHEN/) CHEN X
                                                                                                                                                                                                                                                                                                                                                            CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocal Similarity
                                                                                                                         GENOME THERAPEUTICS CORP.

h 6.3%; Score
Similarity 18.0%; Pred.
                                        Similarity
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                                                            __acterial polypeptide #13272.
US2003233675-A1.
                                                                                                                                           AAU03852 standard;
G protein-coupled 1
WO200138533-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                              C. albicans BAX-associated F WO200264766-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR96242 standard; protein; 264 AA. Novel S. pneumoniae protein sequence, US6800744-B1.
                                                                                                                                                                                                                 G protein-coupled WO200138533-A2.
                                                                                                                                                                                                                                                                                                ADH51470 standard; protein; Rat MT1 receptor amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S. pneumoniae type WO200277021-A2.
                          (CAOY/) CAO Y.
(HINK/) HINKLE G :
(SLAT/) SLATER S (
(CHEN/) CHEN X.
                                                                                                                                                                                                                                                                                         FR2835847-A1.
                                                                                                                                                                                                                                                                                                                                                              E. coli proliferation WO200044906-A2.
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ry Match 6.3%; Score
t Local Similarity 18.0%; Pred.
                                                                                                                                                                               (PHAA ) PHARMACIA & UPJOHN.
ry Match 6.3%;
t Local Similarity 19.1%;
                                                                                                                                                                                                                                    AAU03851 standard;
                                                                                                                                                                                                                                                                                                                          (ELIT-) ELITRA PHARM INC.
(ELIT-) 6.3%;
ry Match 6.3%;
t Local Similarity 31.7%;
                                                                                                                                                                                                                                                                                                                                                                               AAB15936 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHIR-) CHIRON SPA. (GENO-) INST GENOMIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABU02182 standard;
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ry Match 6.3%;
Local Similarity 23.5%;
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th
6.3%;
Similarity 19.1%;
Similarity
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                 GOLDMAN B
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                 ξΩ
                                                                                                                                                                                                                           ; protein; 397 AA. receptor-like (GPCR-like)
                                                                                                                                                    protein; 433 receptor-like
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4 strain
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6.3%;
21.9%;
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6.3%;
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protein
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n protein
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l sequence
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Pred. No. 8.
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RESULT 799
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                                                                                                             Human transporter and ion channel ('W02004048599-A2.
                                                                                                                                                                                           Human NF-kappaB
WO2004065577-A2.
                                                                                                                                                                                                                                                         ADA34178 standard, protein; 467
Acinetobacter baumannii protein
US6562958-B1.
13-MAY-2003.
                                                                                                                                                                                                                                                                                                                                        Propionibacterium WO2003033515-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                Propionibacterium WO200181581-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                         AAU45917 standard; protein; Propionibacterium acnes imm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADM72132 standard; protein; 392 AA. Human NTRAN polypeptide (clone ID 7 WO2004022705-A2.
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WO2004040000-A2.
                                             Enterococcus 1
US6617156-B1.
                                                                                                                                                                                    05-AUG-2004.
                                                                                                                                                                                                                                                                                                                                                            ABM42436 standard;
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                                                                ADH86490 standard;
                                                                                                            10-JUN-2004.
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                   (BUSH/) BUSH D.
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                                                                                                                                                                                                                                                                                                                        CORIXA CORP.
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h 6.3%;
Similarity 19.1%;
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                           DOUCETTE-STAMM L
                                                   ndard; protein;
faecalis polype
                                                                                                                                                                                                   rd; protein; 473 AA. pathway-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sEQ ID NO:
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predicted
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                                                                                                                                                                        Porcine reproductive and respiratory MC20010858-A1.
                                                                                                                                                                                                                                                                 ADQ89656 standard;
Antagonist of cell
WO2004063362-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                        ABB64494 standard; protein; Drosophila melanogaster polyWO200171042-A2.
Seven transmembrane WO9412635-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR98361 standard; protein; 1051 AA.
5'UTR/CORE/ENV/NS1/NS2/NS3 from HCV
JP07133291-A.
        AAR53748 standard; protein; 355 AA.
Seven transmembrane receptor (V28).
                                                                                                                         (MOLE-) INST MOLECULAR AGROBIOLOGY.
(MATE-) INST MATERIALS RES & ENG.
(MATE-) Score
ry Match 6.2%; Score
t Local Similarity 23.8%; Pred.
                                                                                                                                                                                                                                            (CYCL-) CYCLACEL LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAY-1995.
(TOFU ) TONEN CORP.
                                                                                  Rat 164-1h protein
WO2003097686-A1.
                                                                                                      NDF74954 standard;
                                                                                                                                                                                                                                                                                                            (DEVE-) DEVELOGEN ENTWICKLUNGSBIOLOGISCHE FORSCH.

77 Match 6.3%; Score 75; DB 8; Le
10cal Similarity 22.9%; Pred. No. 1.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                               7-SEP-2001
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(REAS-) RES ASSOC BIOTECHNOLOGY.
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) SANWA KAGAKU KENKYUSHO CO.
) TONEN CORP.
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RESULT 819
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(IPFP-) IPF PHARM GM
(FORS/) FORSSMANN U.
......ard; protein;
US6348574-B1.
                                                                                         AAU91235 standard; protein; 355 AA.
Human 7 transmembrane domain receptor
                                                                                                                                                                            AAB82786 standard; pi
Human CX3C chemokine
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Human mutant G proi
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(MILL-) MILLENNIUM PHARM INC
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                                                                                                                                                                   WO200160406-A1.
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Human G protein-coupled receptor (GPCR)
US6555339-B1.
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08-AUG-2022

(LIFE-) LIFESPAN BIOSCIENCES INC.

6.2% Score 74.5; I

25.8% Pred. No. 16;
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Human Chemokine (C-X3-C) receptor 1 protein
W02003025138-A2.
27-MAR-2003.
127-MAR-2003.
128-2003 SIOTECHNOLOGY INC.
129-2003 SIOTECHNO
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ADH14224 standard; protein;
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Human CX3C chemokine fractalkine receptor
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Human fractalkine i
WO2003039475-A2.
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ry Match 6.2%;
t Local Similarity 25.8%;
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Amino acid sequence of human chemok
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(TOPI-) TOPIGEN PHARM INC.
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ry Match 6.2%;
t Local Similarity 25.8%;
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(BAAK/) BAAK J.
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BEHA/) BEHAN D P.
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Best
RESULT
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                                                                      Best Local Similarity RESULT 842
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                                                                                                                                                        Best Loca
RESULT 841
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ESULT 839
                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human serotonin V28.
US2003105292-A1.
05-JUN-2003.
(LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D T
                                                                                                                        ADQ39421 standard; protein; 355 AA. Human myocardial infarction-associated W02004058052-A2.
                                                                                                                                                                                                ADP23931 standard; protein; 355 PRO polypeptide SEQ ID NO:1109. WO2004041170-A2. 21-MAY-2004.
                                                                                                                                                                                                                                                                                ADP54585 standard; protein;
Human PRO protein sequence 9
WO2004039956-A2.
13-MAY-2004.
                                        ADQ39422 standard; protein; 362 AA. Human myocardial infarction-associated WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                Human PRO protein WO2004039956-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADQ18141 standard; protein; 355 AA. Human soft tissue sarcoma-upregulated WO2004048938-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADO29269 standard;
Human GPCR CX3CR1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human CX3CR1 polypeptide.
WO2003104484-A1.
                                                                                                     (APPL-) APPLERA CORP.
                                                                                                                                                                                      (GETH )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004040000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH10680 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                 ADP56020 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (META-) METABOLEX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PRIM-) PRIMAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
837
                                                                                                                                                                  Local Similarity
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Local Similarity
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                    APPLERA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                   PROTEIN DESIGN LABS h 6.2%; Similarity 25.8%;
                                                                                                                                                                                      GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                        GENENTECH INC.
                                                                                                                                                                                                                                                                       GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             V28.
                                                                                                                                                                                                                                                                                                                                                                                   ; protein; 355 AA.
sequence SEQ ID NO:1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein;
SEQ ID NO
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25.8%;
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25.8%;
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25.8%;
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NO:370.
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SEQ ID NO:561.
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Best Loca
RESULT 848
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RESULT S
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                                                 Human protein encoded by a f EP1396543-A2.
                                                                                                                                     AAM93692 standard;
Human polypeptide,
EP1130094-A2.
                                                                                                                                                                                                                  Rat 164-1b protein WO2003097686-A1.
                                                                                                                                                                                                                                                                                                          Rat 5-HT2 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW77110 standard; protein;
Rat 5-HT2A serotonin recepto
WO9838217-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW77109 standard; protein; 4:
Pat 5-HT2A serotonin receptor
                                                                                                                                                                          (TAKE) TAKEDA CHEM IND LTD.

ry Match 6.2%;
t Local Similarity 23.3%;
ADQ96138 standard; protein; 562 AA
                                                                                                                            05-SEP-2001
                                                                                                                                                                                                                                    ADF74971 standard;
                                                                                                                                                                                                                                                                                               US6383762-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW77111 standard; pı
Rat 5-HT2A serotonin
                                   (REAS-) RES ASSOC BIOTECHNOLOGY.
                                                                                                                  (HELI-) HELIX RES
                                                                                                                                                                                                                                                                                                                   ABB07980 standard;
                                                                                                                                                                                                                                                                                                                                                       (TEIT/) TEITLER M.
(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
                                                                                                                                                                                                                                                                                                                                                                                                          Rat 5-HT2A serotonin
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TEIT/) TEITLER M.
(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TEIT/) TEITLER M.
(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
                                                                                                                                                                                                                                                                           (SYNA-) SYNAPTIC PHARM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                  AW77104 standard; protein;
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                                                                                                                                                                                                                                                        Local Similarity
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                                                                                            ; INST.
6.2%;
y 23.1%;
                                                                                                                                                                                                                                                                                                       protein;
                                                                                                                                              protein; 562 AA.
SEQ ID NO: 3602.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein; 471 AA.
in receptor C322E
                                                                                                                                                                                                                          protein; 481 AA. (SeqID 30).
                 6.2%;
                                                                                                                                                                                                                                                       6.2%;
21.0%;
                                                                                                                                                                                                                                                                                                                                     6.2%;
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21.0%;
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21.0%;
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receptor C322R mutant.
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                                                                 ; 562 AA.
full length
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or C322K
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Pred.
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Pred. No. 23;
                  Pred.
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                  Score 74.5;
Pred. No. 3
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Best Local Similarity RESULT 854
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RESULT 853
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                                                                                                    Human adipocyte bait protein; WO200286122-A2.
                                                                                                                                                                           US6605709-B1.
12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                             Acinetobacter baumannii protein US6562958-BI. 13-MAY-2003.
                                  Human adipocyte WO200286122-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR86160 standard; protein; 587 Aspergillus fumigatus essential WO2004067709-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T cell activation WO2004058805-A2.
                                                                                                                                                                                                                                                                               AAE20477 standard;
HCV-S1 full-length
                                                                                                                                                                                                                                                                                                                               (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                     (GENO-) GENOME THERAPEUTICS ry Match 6.2%; t Local Similarity 21.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster polypeptide WO200171042-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABB62948 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ELIT-) ELITRA CANADA LID.
exy Match 6.2%;
t Local Similarity 18.2%;
                                                       ABU70366 standard;
                                                                                                                                                                                                                                            (MOLE-) INST MOLECULAR & CELL BIOLOGY.
                                                                                                                                                                                                                                                                31-JAN-2002
                                                                                                                                                                                                                                                                                                                                          07-FEB-2002
                                                                                                                                                                                                                                                                                                                                                 Herbicidally active WO200210210-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ASAH-) ASAHI KASEI
                                                                                            (HYBR-)
                                                                                                                                                                                                                                                                         WO200208447-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PEKE ) PE CORP NY
                   (HYBR-)
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                                                                        Local Similarity
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Similarity
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bait proteir
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6.2%;
23.1%;
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                                                                                                                                                                                                                                                                                protein; 3010 AA. polyprotein.
                                                                                                                                                                                                                                                                                                                                                                   protein;
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polypeptide SEQ ID NO
                                                                        6.2%;
18.5%;
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18.
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b; Score
b; Pred.
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Pred.
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Pred. No.
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No. 1.
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No. 30;
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No. 32;
74;
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No.
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No. 3e+02;
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No.
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61;
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        Length 231;
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20-JA.
(JCRP-) (
Query Match
Best Local &
RESULT 868
ID ABP81'
DE Hum'
PN WC
PD
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Best Local Si
RESULT 866
ID AAW15786 E
DE Melatonin
PN JP0908458
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ID ADR940
DE Novel
PN US6800
PD 05-OCT
PA (GENO-
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RESULT 862
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(GENO-) INST GENOMIC
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FR2807446-A1.
12-OCT-2001.
(INRG ) INRA I
                                                                                                                                                                                                                                                                                                                                                                                 AAR88412 standard; protein;
High-affinity melatonin-la 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
(GOLD/) GOLDMAN B S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bacterial polypeptide #22913. US2003233675-A1.
                       ABP81840 standard; protein; 350 AA. Human melatonin receptor type la protein SEQ WO200261087-A2.
                                                                                                                                                  AAW94761 standard; protein; 350 l
Human melatonin receptor protein
                                                                                                                                                                                                                                                     Melatonin receptor JP09084581-A.
                                                                                                                                                                                                                                                                AAW15786 standard; protein; Melatonin receptor protein.
                                                                                                                                                                                                                                                                                                    28-DEC-1995.
(MASS-) MASSACHUSETTS GEN HOSPITAL.
(YASS-) MASSACHUSETTS GEN HOSPITAL.
(MASS-) MASSACHUSETTS GEN HOSPITAL.
(MASS-) MASSACHUSETTS GEN HOSPITAL.
(18.5%; Score
1 Similarity 18.5%; Pred.
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S. pneumoniae type
WO200277021-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADR94027 standard; protein;
Novel S. pneumoniae protein
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Lactococcus lactis protein )
                                                                                                                                                                                                                         31-MAR-1997.
(TAKE ) TAKEDA CHEM
                                                                                                                                                                                                                                                                                                                                                                    WO9535320-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAR-2003.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel human polypeptide WO2003023013-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABO00448 standard;
                                                                                                        20-JAN-1999.
(JCRP-) JCR PHARM
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US6800744-B1.
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h 6.2%; Score 74;
Similarity 24.3%; Pred. No.
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4 strain
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18.5%;
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6.2%;
24.3%;
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18.5%;
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protein
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sequence,
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RESULT
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Human GPCR MTNR1A, S
WO2004040000-A2.
13-MAY-2004.
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                                                                                                                                                                                                                                                                                                                      Bacterial polypeptide #6580.
US2003233675-Al.
                                              AAR54067 standard; protein; Non-A, non-B hepatitis virus JP06141870-A.
                                                                                                               05-JUL-2001.
(SAOC ) MERCIAN CORP.
                                                                                                                                 Flavobacterium lutescens L-lysine-6-aminotransferase \pm 0.000148216-Al.
                                                                                                                                                                                                            AAY80509 standard; protein; 492 AA. F. lutescens L-lysine:2-oxoglutarate WO200008170-A1.
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Rat growth hormone
WO9721730-A1.
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                                                                                                                                                     AAG64105 standard; protein;
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                                                                                                                                                                                                                                                                    (CHEN/) CHEN X. (GOLD/) GOLDMAN
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                                                                                                                                                                                           (SAOC ) MERCIAN CORP.
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                  ZH TOKYOTO RINSHO IGAKU
SANWA KAGAKU KENKYUSHO (
TONEN CORP.
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h 6.2%; Score 74;
h 20.4%; Pred. No.
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secretagogue receptor
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Arabidopsis thaliana p
EP1033405-A2.
06.SEP-2000.
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                                                                                                                                    Codon optimised hCMV IE1 encoded W0200405B166-A2.
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5'UTR/CORE/ENV/NS1
JP07133291-A.
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10-AUG-2001.

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                                                                                                                                                                                                                                                                                       Arabidopsis thaliana
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(TOFU ) TONEN CORP.
                                                 AAG51385 standard; protein; 442 AA.
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TY MATCH
LOCAL Similarity 17.4%;
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ide #2095.
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Prokaryotic essential
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Arabidopsis thaliana
EP1033405-A2.
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Wild type hCMV IE1.
WC2004058166-A2.
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EP1033405-A2.
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Protein encoded by
WO2004042346-A2.
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Protein encoded by
WO2004042346-A2.
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WO200163286-A2.
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Streptococcus po WO200234771-A2. 02-MAY-2002.
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24-JUN-2003.
(GENO-) GENOME THERAPEUTICS (
6.1%;
ery Match 6.1%;
22.6%;
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(HINK/) HINKLE G (SLAT/) SLATER S (CHEN/) CHEN X.
                                                                                       E. faecium protein US6583275-B1.
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NANBH virus strain
EP532167-A2.
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13-MAY-2004.
(SYGN) SYNGENTA PARTICIPATIONS AG.
(SYGN) SYNGENTA PARTICIPATIONS AG.
18-2%; Score
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                 ABP29367 standard; protein; 249
Streptococcus polypeptide SEQ II
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Bacterial polypeptide #17311.
US2003233675-Al.
18-DEC-2003.
                                                                                                           ADC97146 standard;
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(ASTR ) ASTRA AB.
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ry Match 6.1%; Score
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sequence SEQ ID
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Fungal 7091 elongase proteir
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(LEON/) EUN-YEONG LEONARD
(HUAN/) HUANG Y.
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VERNET C A M.
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ALSOBROOK J P.
LEPLEY D M.
RIEGER D K.
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LEITE M W.
ZHONG H.
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SPYTEK K A.
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TAUPIER R J.
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Rat growth hormone s
WO200132705-A1.
10-MAY-2001.
                                                                               AAG24012 standard; protein; 4
Arabidopsis thaliana protein
EP1033405-A2.
06-SEP-2000.
                                                                                                                                       AAG24013 standard; protein; 4 Arabidopsis thaliana protein EP1033405-A2.
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Staphylococcus aureus protein of
EP841394-A2
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                                Protein encoded WO200277183-A2.
                                        ABU31419 standard;
Protein encoded by
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ry Match 6.1%;
t Local Similarity 19.4%;
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NE BEECHAM PLC.
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(CNRS ) CNRS CENT NAT RECH
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EP1033405-A2.
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EP1033405-A2.
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Protein encoded by
WO200277183-A2.
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ADQ96000 standard; protein; 608 AA. Transport cell activation associated protein
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Prokaryotic (
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WO2004058805-A2.

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24-JUL-1997.
(SMIK) SMITHKLINE BEECHAM P.
(SMIK) SMITHKLINE BEECHAM P.
6-1%;
ery Match 6-1%;
23.3%;
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27-SEP-2001.
(PEKE ) PE CORP NY.
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Human protein similar to yeast S
WO2004078035-A2.
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15-JUL-2004.

(ASAH-) ASAHI KASEI PHARMA CO

6.1%;

2ry Match 6.1%;

19.5%;
      ABJ19057 standard; protein; 792 AF
Pathogen specific antigen related
                                                                          AAU36734 standard; protein; 792
Staphylococcus aureus cellular p
                                                                                                                                         Protein encoded WO200277183-A2.
                                                                                                                                                 ABU42392 standard;
Protein encoded by
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Staphylococcus aureus spoIIIE protein.
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(SMIK ) SMITHKLINE BEECHAM
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                                                  (ELIT-) ELITRA
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        SEQ ID
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        334.
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Best
RESULT
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                                                                                                                                          Marker gene re
EP1394274-A2.
03-MAR-2004.
                                                                                                                                                                                                                                                                                                                                                                                       Novel human diagnostic protein; 91: W0200175067-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW68466 standard;
Protein encoded by
WO9825960-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-AUG-2002.
(CIST-) CISTEM BIOTECHNOLOGIES
                                                                          ABG05866 standard; protein; Novel human diagnostic prote WO200175067-A2.
                                                                                                                                                              ADJ76159 standard; protein;
Marker gene related amino ac
                                                                                                                                                                                                             (CURT/) CURTIS R A J. (SILO/) SILOS-SANTIAGO
                                                                                                                                                                                                                                                 ABB07819 standard; protein; 966 Mouse polycystic kidney disease
                                                                                                                                                                                                                                                                              (MILL-) MILLENIUM PHARM INC.
ry Match 6.1%;
t Local Similarity 21.3%;
                                                                                                                                                                                                                                                                                                                   Murine polycystic WO200177331-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADQ95946 standard; protein; 910 AA. T cell activation associated protein
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Human protein similar
WO2004078035-A2.
                                                                                                                                                                                                                                          US2002035056-A1.
                                                                                                                                                                                                                                                                                                                                                                             (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JUL-2004.
(ASAH-) ASAHI KASEI PHARMA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004058805-A2.
                   ADR99135 standard;
                                                                                                                                   (GENO-) GENOX RES INC.
                                                                                                                                                                                                                                                                                                           18-OCT-2001
                                                                                                                                                                                                                                                                                                                                        AAM51861 standard;
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                                     Local Similarity
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h 6.1%; Score 73; DB
Similarity 26.2%; Pred. No. 78;
                                                       INC.
                                                                                                                                                                                                                                                                                                                            ; protein; 966 A
kidney disease
                   protein; 971
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6.1%;
21.3%;
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          to yeast
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                                                                                   tein; 971 AA.
protein #5857
                                                                                                                                                              n; 966
acid s
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in #2357
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#6 isolated
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Best Loca
RESULT 948
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Query Match
Best Local Similarity 22.9%; Pred. No. 22;

RESULT 951
 Best Local Similarity
RESULT 955
ID AAW23832 standard;
DE Human oxytocin rece
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                                                                                                                                                                                                                          (DOUC/) DOUCETTE-STAMM L A. (BUSH/) BUSH D. Query Match 6.1%:
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                                                             AAR37264 standard; p
Oxytocin receptor.
EP542424-A1.
19-MAY-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABU15302 standard; protein encoded by EW0200277183-A2.
                                                                                                                                                               Enterococcus faecalis polypeptide #2037.
US6617156-B1.
                                                                                                                                                                                                                                                              Diterococcus faecalis polypeptid US6617156-B1
                                                                                                                                                                                                                                                                                                                                                         ABB53675 standard;
Lactococcus lactis
FR2807446-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABG07373. standard; protein; 976 AA. Novel human diagnostic protein #7364. W02001,75067-A2.
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(FARB ) BAYER PHARM
AAW23832 standard; protein;
Human oxytocin receptor.
                                                                                                                                                                                                                                                                                                               (INRG) INRA INST NAT RECH AGRONOMIQUE.

EXY Match

Local Similarity 25.9%; Pred. No. 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                            ABB53879 standard;
Lactococcus lactis
FR2807446-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABU05456 standard; protein; 209 AA.
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CY Match 6.1%;

Local Similarity 20.5%;
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                                                    ROHT ) ROHTO PHARM
                                                                                                                                      BUSH/) BUSH D.
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                                                                                                                                                                                                                                                                                                                                                                    protein; 325 AA. protein ydhB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein; 307 AA protein yfgG.
                                                                                              protein;
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Prokaryotic (
                              4 CO LTD.
6.1%;
24.5%;
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RESULT 956
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RESULT 957
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                                                                                                                                           AAR58665 standard; protein; 448 AA. Bovine PACAP receptor type 1B mature EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human oxytocin receptor protein. W02003664402-Al.
                                                            AAR58663 standard; protein; 476 AA. Bovine PACAP receptor type 1A mature EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                    Human oxytocin receptor (OXTR) protein WO2003093816-A2.
                                                                                                    (TAKE) TAKEDA CHEM IND LTD.

(TYP Match 6.1%;

It Local Similarity 29.6%;
                                                                                                                                                                                                                                        ADO29590 standard; protein; 389 AA. Human GPCR OXTR, SEQ ID NO:692.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABP81865 standard; protein; 389 Human oxytocin receptor protein WO200261087-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAM40217 standard;
Human polypeptide
WC200153312-A1.
                                                                                                                                                                                                                                                                     (UYOU-) UNIV QUEBEC A MONTREAL.
(UYOU-) UNIV QUEBEC A MONTREAL.
(UYMO-) UNIV MONTREAL CENT HOSPITALIER.
6.1%; Score 72.5;
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AAR58657 standard; protein; 485
                                                                                                                                                                                                           (PRIM-) PRIMAL INC.
                                                                                                                                                                                                                               WO2004040000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PFIZ ) PFIZER LTD. (PFIZ ) PFIZER INC.
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                                        TAKEDA CHEM IND LTD.
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SEQ ID NO
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20-DEC-2001.
(REGC) UNIV CALIFORNIA.
6.1%;
Match --13rity 22.3%;
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(SLAT/) SLATER S C
(CHEN/) CHEN X.
(GOLD/) GOLDMAN B
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US2003233675-Al.
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Bovine PACAP receptor type:
EP618291-A2.
05-OCT-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-OCT-1994.
(TAKE ) TAKEDA
        ADQ96378 standard; protein; 208 AA. T cell activation associated protein #278. WO2004058805-A2.
                                                                                                                                                                                                                                                                                                 ABB05429 standard; protein; Arabidopsis thaliana ABH1 pu WO200196585-A2.
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ry Match 6.1%;
t Local Similarity 29.6%;
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                                                                                        AAR34580 standard; protein; 3 Human hepatitis C virus gene
                                                                                                                                                      Protein encoded WO200277183-A2.
                                                                                                                                                              ABU25159 standard;
Protein encoded by
                                                                                                                                                                                                                                    Arabidopsis thaliana
                                                                                                                                                                                                                                             AAE31528 standard;
                                                                                                                                                                                                                                                                                                                                                     (ROOS/) ROOS J.
(STAU/) STAUDERMAN
(VELI/) VELICELEBI
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US2004009537-A1.
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ry Match 6.1%; Score
Local Similarity 22.3%; Pred.
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Listeria monocytogenes
WO200177335-A2.
                                                                               Arabidopsis thaliana protein; EP1033405-A2.
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Protein encoded by
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2ry Match 6.0%;
3t Local Similarity 21.6%;
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                         AAG50202 standard; protein; Arabidopsis thaliana protein EP1033405-A2.
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Protein encoded by
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Prokaryotic
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protein #1247.
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Protein encoded by
WO200277183-A2.
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                                                                                                                                    AAG16336 standard;
                                                                                                                                                                                   Arabidopsis thaliana
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             GOLDMAN B S.
                                                                 .....andard; protein; 543 AA.
polypeptide #12601
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na protein fragment
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na protein fragment
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Prokaryotic
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upregulated
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21.8%;
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T cell activation a
WO2004058805-A2.
                                                                                                                                                                                 Human xenotropic& WO2003072824-A1.
                                                                                                                                                                                                                                                             ABP81969 standard; protein;
Human GPCR XPR1 protein SEQ
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Tumour-associated a
WO2003024392-A2.
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EP1033405-A2.
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Protein encoded by
                                   Photorhabdus luminescens WO200294867-A2. 28-NOV-2002.
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h 6.0%; Score
Similarity 20.8%; Pred.
                  CNRS
                                                                                                                                                                 SANKYO CO LTD.
                                                                                                                                                                                                                                                                                                                                                                            GENENTECH
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6.0%;
n 6.0%;
Similarity 19.5%;
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S CENT NAT RECH S
6.0%;
ilarity 21.3%;
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antigenic
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Prokaryotic (
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20.8%;
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d protein
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ID NO:424.
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target
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c retrovirus
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RESULT 1001
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RESULT 1003
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Recombinant fusion
WO200008469-A1.
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WO200075335-A2.
                                              Arabidopsis thaliana EP1033405-A2.
                                                                 AAG56417 standard;
                                                                                                                         Human protein encoded EP1396543-A2.
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(HELI-) HELIX RES
                                                                                                                                              ADL31784 standard;
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Recombinant fusion pHCAP-3 p
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(BODA-) BODAO GENE
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ry Match 6.0%; Sco
t Local Similarity 25.2%; Pre
                                                                                                                                                                                                                                                                                   WO200008469-A1.
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ry Match 6.0%;
t Local Similarity 23.6%;
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h 6.0%;
Similarity 23.6%;
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standard;
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pHCAP-4 p
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6.0%; Score 72;
26.3%; Pred. No.
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pHCAP-1 polyprotein.
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full
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fragment
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Pred. No.
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No. 17;
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Best Local Similarity RESULT 1013
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Best Local Similarity
RESULT 1015
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RESULT 1014
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US2003150017-A1.
07-AUG-2003.
                                                 ABP58069 standard; protein; 382 AA. Human G-protein coupled receptor GA
                                                                                                                        ABU03456 standard; protein; 382 AA. Angiogenesis-associated human prote W0200279492-A2.
                                                                                                                                                                                                         AAR88410 standard; protein; High-affinity melatonin-la WO9535320-A1.
                                                                                                                                                                                                                                                                                                                         Ovine MLIA protein. US2004161823-A1.
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                                                                                                                                                                (MASS-) MASSACHUSETTS GEN HOSPITAL.
ry Match 6.0%; Score
t Local Similarity 23.1%; Pred.
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(MINT/) MINTIER G.
(RAMA/) RAMANATHAN
                                                                                                                                                                                                                                                                                                                                             ADR40542 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                     (MESA/) MESA J R B.
(GRAH/) GRAHAM M W.
(FAIR/) FAIRBAIRN D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW37976 standard; protein;
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AVENTIS PHARM INC.
h 6.0%;
Similarity 22.3%;
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EOS BIOTECHNOLOGY INC.
6.0%; Score
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No. 18;
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Best Loca.
RESULT 1025
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RESULT 1021
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Human EDG-1 protein.
US2002155512-A1.
24-OCT-2002.
                                         ADJ45541 standard; g
LXR-ligand induced t
U82004023276-A1.
05-FEB-2004.
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10-APR-2003.
(RIGE-) RIGEL PHARM INC.
6.0%;
--- Match --- 11-rity 22.3%;
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Human endothelial
WO2003029277-A2.
                                                                                                                                      ABM85457 standard; protein; 382 AA. Human protein sequence hCP1630135. WO2003073826-A2.
                                                                                                                                                                                                                            ADN38684 standard; protein; 382 AA. Cancer/angiogenesis/fibrosis-related polypeptide, WO2003042661-A2.
                                                                                                                                                                                                                                                                                                                            ADC40477 standard; protein; Protein of human EDG-1.
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Human sphingolipid
WO200261087-A2.
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Human EDG1, SEQ ID
WO2003072824-A1.
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                                                                                           (SAGR-) SAGRES DISCOVERY.
(SAGR-) 6.0%;
ry Match 6.0%;
t Local Similarity 22.3%;
                                                                                                                                                                                                                                                                      (TAKE) TAKEDA CHEM IND LTD.
ry Match 6.0%;
t Local Similarity 22.3%;
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                                                                                                                                                                                                       EOSB-) EOS BIOTECHNOLOGY INC
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MAO M.
LINSLEY P
LUND E.
                               WARD T R.
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differentiation sphingolipid
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                                                              protein; 38
transcript
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22.3%;
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Edg1 protein
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Query Match
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RESULT 1027
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                                                                                                                                                                                                                                                                                                                                                                   Rat vesicle membrane protein; 394 AA. US2003175787-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human cancer associated WO2004074321-A2.
                                                               ABU26033 standard;
Protein encoded by
WO200277183-A2.
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(HINK/) HINKLE (
(SLAT/) SLATER :
                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200192296-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABB05226 standard; protein; 390 AA. Catostomus commersoni isotocin receptor
                                                                                                                                  WO200283876-A2.
24-OCT-2002.
                                                                                                                                                   ABP75877 standard; protein; 470 AA.
Human secretory polypeptide SPTM SEQ
                                                                                                                                                                                                                                        AAR22000 standard;
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ry Match 6.0%;
t Local Similarity 22.3%;
ABJ37074 standard;
fuman breast cance
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                                                                                                                                                                                                    ) UNIV CALIFORNIA.
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                                                                                                     INCYTE GENOMICS INC.

h 6.0%;
Similarity 22.4%;
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ndard; protein; 565 AA.
cancer / ovarian cancer related protein #50.
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Prokaryotic essential
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protein #727
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1 protein
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n Region II,
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Protein encoded by Prokaryotic essential
W0200277183-A2.
03-OCT-2002.
(ELIT-) ELITEA PHARM INC.
EXITAL STANDARD SCORE 71.5;
ATY MAICH
LOCAL Similarity 21.3%; Pred. No. 74
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Human calcitonin re
WO9821242-A1.
                                                                                                                                                        ABG00883 standard; protein; Novel human diagnostic prote W0200175067-A2.
                                                                                                                                                                                                                                                                                                                                         AAB07591 standard; protein; A human methionine synthase
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ADM43211 standard; protein; 698 AA. Human methionine synthase reductase US2003082676-A1.
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Human methionine synthase re
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(HUMA-) HUMAN GENOME
                                                                                                                (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                              20-JUL-2000.
(UYMC-) UNIV MCGILL.
                                                                                                                                                                                                                                                                                                                        WO200042196-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human methionine synthase
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                                                                                                                                                                                                                                                                                                                                                                                                                                         (WILS/) WILSON A. (ROSE/) ROSENBLATT D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GRAV/) GRAVEL R A. (ROZE/) ROZEN R. (LECL/) LECLERC D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003082676-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GRAV/) GRAVEL R A.
(ROZE/) ROZEN R.
(LECL/) LECLERC D.
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protein #874
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reductase
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reductase
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Met22Ile

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Best Local Similarity RESULT 1050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GRAV/) GRAVEL R A. (ROZE/) ROZEN R. (LECL/) LECLERC D. (WILS/) WILSON A.
                                                                                                                                                    ABB78282 standard; I
Amino acid sequence
WO200263307-A2.
                                                                                                                                                                                                   AAYS1606 standard; protein; 890 AA.
Human wml protein.
DE189845277-C1.
09-MAR-2000.
(UYMU-) UNIV MUENCHEN MAXIMILIANS LUDWIG.
21Y Match
5.0%; Score 71.5;
Local Similarity 23.8%; Pred. No. 1.3
                              27-FEB-2003.
(GEHO ) GEN HOSPITAL
                                                          Human Protein 07 WO2003016475-A2.
                                                                                                                                                                                                                                                                                                                                              ADQ39858 standard; protein; 725 AA. Human myocardial infarction-associated WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                               ADQ39857 standard; protein; 698 AA. Human myocardial infarction-associated WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADM43207 standard; protein;
Human wild-type methionine £
US2003082676-A1.
01-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADM43213 standard; protein; 698 AA.
Human methionine synthase reductase Cys37Tyr variant.
US2003082676-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-2003
                                                                                ADD46013 standard;
                                                                                                                                  (PHAA)
                                                                                                                                                                                                                                                                                                                                                                                                                  (APPL-) APPLERA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ROSE/) ROSENBLATT D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (LECL/) LECLERC D.
(WILS/) WILSON A.
(ROSE/) ROSENBLATT D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ROZE/) ROZEN R.
(LECL/) LECLERC D.
                       (FARB ) BAYER AG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GRAV/) GRAVEL R A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GRAV/) GRAVEL
                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                      PHARMACIA & UPJOHN COh 6.0%;
Similarity 23.8%;
Similarity
                                                                                                                                                                                                                                                                                                                        APPLERA CORP.
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                                                                     076024,
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                                                                                                                                                                  protein; 8
e of human
                                                                     protein, 890 AA.
24, SEQ ID NO 11685.
                                                                                                                                                                                                                                                                                                                                                                                              6.0%;
22.8%;
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                                   CORP.
6.0%;
23.8%;
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k; Score
k; Pred.
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n wolframin
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No. 90;
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No. 95;
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No. 90;
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No. 1.3e+02;
71.5; DB 7;
No. 1.3e+02;
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                                                                                                         .5; DB 5;
. 1.3e+02;
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                                                                                                                                                                   polypeptide
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                                                                          08-AUG-2002.
08-AUG-2002.
(LIPE-) LIPESPAN BIOSCIENCES INC.
6.0%; Score 71.5;
xry Match
22.4%; Pred. No. 6.
                                                                                                                      Human GPCR CELSR2 protein SEQ ID NO:524. WO200261087-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB42192 standard;
Human ORFX ORF1956
WO200058473-A2.
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Human MP53 protein
WO2003083047-A2.
                                                                                                                                                                                                                                    AAM50866 standard, protein; 2923 AA.
Cadherin EGF LAG seven-pass G-type r
                                                    ADC15499 standard;
Human cadherin EGF
                                                                                                                                                                                                                                                             23-AUG-2001.
(SMIK ) SMITHKLINE BEECHAM PLC.
6.0%; Score 71.5; DB 4;
ry Match 22.4%; Pred. No. 6.6e+02;
                                                                                                                                                                                                                                                                                                                        AAU07054 standard; protein; 2923 AA.
Human Flamingo protein encoded by cDNA splice variant
                                                                                                                                                                                                                                                                                                                                                                                                      ABULLESS Standard; protein; 2894 AA.
Human MDDT polypeptide SEQ ID 503.
WD200274444-79
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB11404 standard; peptide;
Human FLAMINGO 1 homologue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human disease detection and WO2003062379-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200157188-A2.
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ry Match 6.0%;
t Local Similarity 22.4%;
                                                                                                                                                                                           (STRD ) UNIV STANFORD.
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BOTSTEIN D.
BROWN P O.
PEROU C M.
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h
6.0%;
Similarity 22.4%;
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                                                    protein; 2923 AA.
LAG seven-pass G-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein; 2405 AA. polypeptide sequence
                                                                                                                                                                       6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.0%;
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| treatment
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SEQ ID NO:1774
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SEQ
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.3e+02;
                                                     receptor
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.6e+02;
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.6e+02;
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Query Match
Best Local Similarity
RESULT 1060
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ADC86499 Standard Protein SEQ 1.

Human GPCR protein SEQ 1.

EP1270724-A2.

O 2-JAN-2003.

O 2-JAN-2003.

A (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

PA (ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.

6.0%; Score 71.5; DB 7; Ler

Match --(1arity 22.4%; Pred. No. 6.6e+02;
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(ROSS/) ROSS D.
(SEIT/) SEITZ R.
(VRIJ/) VAN DE RIJN :
                                            AAR31621 standard;
Hepatitis C virus
WO9300365-A2.
                                                                                                                                       AAR34468 standard; protein; 3011 
Encoded by full-length Hepatitis 
JP05068562-A.
                                                                                                                                                                                                                          Human Flamingo polypeptide.
WO200161003-A1.
23-AUG-2001
                                                                                                                                                                                                                                                                                                                                AAU74826 standard;
Human REPTR 9 prote
WO200198354-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADO29245 standard;
Human GPCR CELSR2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE54411 standard; protein;
Human Protein XP_042739, SE
WO2003016475-A2.
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WO2003016475-A2.
27-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GEHO ) GEN HOSPI
(FARB ) BAYER AG.
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(FARB ) BAYER AG.
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Human Protein XP_042739, SEQ ID NO 210
                                                                                                                                                                                                                                                                                                                                                                                                                               ₩O20040400000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                        (PRIM-) PRIMAL INC.
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                                                                                          SANWA KAGAKU KENKYUSHO CO.
h 6.0%; Score 71.5;
Similarity 23.7%; Pred. No. 6
                                                                                                                                                                                      SMITHKLINE BEECHAM PLC.
h 6.0%; Score
Similarity 22.4%; Pred.
                                                                                                                                                                                                                                                                                 INCYTE GENOMICS INC.
h
6.0%;
Similarity 22.4%;
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                                                                                                                                                                                                                                                                                                                                             dard; protein; protein.
                                                        protein; 3011 AA. (HCV) polyprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                       protein; 2923 AA.
SEQ ID NO:346.
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6.0%;
22.4%;
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 DB 2;
.9e+02;
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.6e+02;
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.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 7;
.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 7;
.6e+02;
                                                                                             DB 2;
.9e+02;
                                                                                                                                                                                       DB 4;
.7e+02;
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                                                                                                                                                                                                                                          G-protein coupled human interleukin-8 W09405695-Al.
                                                                                                                                 L6-APR 1996.
(UYNY ) UNIV NEW YORK STATE.
xy Match 5.9%;
19.7%;
19.7%;
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                AAG72377 standard; protein; 312 Human OR-like polypeptide query W0200127158-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                      ABP26255 standard; protein; 295 AA.
Streptococcus polypeptide SEQ ID NO 1686.
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                                                                                                 Human olfactory receptor WO200127158-A2.
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(UYNY ) UNIV NEW YORK
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(CURA-) CURAGEN CORP.
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(GENO-) INST GENOMIC RES.
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                                     (BEHA/) BEHAN D P.
(CHAL/) CHALMERS D T.
(LIAW/) LIAM C W.
(RUSS/) RUSSO J F.
(THOM/) THOMSEN W J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M. catarrhalis protein #1068
US6673910-B1.
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Listeria monocytogenes prote
W0200177335-A2.
18-OCT-2001.
(INSP ) INST PASTEUR.
                                                                                                                                                                                         ABU19912 standard;
Protein encoded by
                                                                                                                                                                                                                                                            ADP29417 standard; protein; 455 AA. Human secreted protein SEQ ID #184. WO2004035732-A2.
                                                                                                                                                                                                                                                                                                                                          ADJ95144 standard;
Novel NOVX protein
WO2003040325-A2.
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                                                                                                  Human endogenous 5HT2A serotonin receptor.
US2003224442-A1.
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2004.
PIVE PRIME THERAPEUTICS INC.
5.9%; Score 71;
5.9% Ored, No.
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h 5.9%; Score 71;
Similarity 20.3%; Pred. No.
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                                               ADC22747 standard; protein; 471 AA. Human G protein-coupled receptor (GUS6555339-B1.
                                                                                                                         ADC22641 standard; protein; 471 AA. Human G protein-coupled receptor (GU86555339-B1.
                                                                                                                                                                                                     ABP81765 standard; protein; 471 AA. Human 5-HT2A receptor protein SEQ ID W0200251087-A2.
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(TEIT/) TEITLER M.
(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
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sry Match
t Local Similarity 23.7%; Pred. No.
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Human serotonin 5-HT2 recept
US5661024-A.
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(AREN-) ARENA PHARM
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Human 5-HT2A serotonin receptor.
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(SYNA-) SYNAPTIC PHARM CORP.
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Pest Local RESULT 1102
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(LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D T
                                                                                                                                        Human myocardial infarction-associated WO2004058055-A2.
                                                                                                                                                                                                                 ADQ39800 standard; protein; Human myocardial infarction-
WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                          ADL90125 standard; protein; 471 Human serotonin receptor 5HT2a. US2003167476-A1.
US5885785-A.
23-MAR-1999.
                AAY01626 standard; protein;
Amino acid sequence of the |
                                                                          Human myocardial
WO2004058052-A2.
                                                                                            ADQ39798 standard;
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                                                         APPLERA CORP.
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                                                                                                                                                                                                                           d; protein; 471 AA. infarction-associated
                                                                                   i, protein;
infarction-
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SEQ ID NO
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tonin 5HT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein; receptor.
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                                         5.9%;
23.7%;
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                human
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human 5-HT2
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2A.
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SYNAPTIC PHARM CORP.

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PA (INSP) INST PASTEUR.
PA (CNRS) CNRS CENT NAT RECH SCI.
Query Match
Best Local Similarity 23.5%; Pro
RESULT 1105
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RESULT 1109
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                                                                                                             ABP35686 standard;
Fungal ZBC protein
WO200224865-A2.
                                                                                                                                                                                                                                                                                                                                                        27-FEB-2003.
(GEHO ) GEN HOSPITAL CORP.
(FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                    ADD48660 standard; protein; Sat Protein BAA25372, SEQ ID WO2003016475-A2.
                                                                                                                                                                                      Aspergillus fumigatus WO200286090-A2.
                                                                                                                                                                                                                                                                                     US2003233675-A1.
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(FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE56383 standard; protein; 545 AA. Rat Protein 070536, SEQ ID NO 2235.
                                     Mouse OCTN3 protein WO200046368-A1.
                                                       AAB20578 standard;
                                                                                          28-MAR-2002.
(MICR-) MICROBIA INC.
                                                                                                                                                                                                          ABJ26399 standard;
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Photorhabdus luminescens protein sequence #3537
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(SYNA-) SYNAPTIC PHARM CORP.
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                                                                                                                                                                                                                                                     (HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                                                                                                                                    ELIT-) ELITRA PHARM
                                                                                                                                                                                                                                            GOLD/) GOLDMAN B S.
                                                                 Local Similarity
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                                            protein;
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INST MOLECULAR MEDICINE 5.9%; Score 71; DB 21.4%; Pred. No. 77;
                                                                                                                                                                                                protein; 559
tus essential
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5.9%;
23.1%;
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23.7%;
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23.7%;
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                                             ; 564 AA.
NO:1.
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D NO 14366.
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Pred. No.
                                                                                                                        563 AA.
#112.
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Pred. No.
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73;
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64;
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74;
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62;
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Best Local Similarity
RESULT 1119
ID ARR30616 standard; p
DE Polypeptide coded by
PN EP521318-A2.
PD 07-JAN-1993.
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ID ADQ9637
DE T cell
PN WC20040
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RESULT 1112
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RESULT 1117
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RESULT 1118
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RESULT 1115
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                                                                                                                                                                                                                                           (SHAR/) SHARMA R.
(RAMA/) RAMANATHAN C S
(WEST/) WESTPHAL R.
(FEDB/) FEDER J N.
(LEEL/) LEE L M.
                                                                                                                                                                              ABR62929 standard; protein; 744 AA. Human neurotransmitter transporter. W02003059947-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAE21800 standard; protein;
Human HIPHUM 0000029 proteir
GB2365432-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADQ96374 standard;
T cell activation a
WO2004058805-A2.
         AAR30616 standard; protein; Polypeptide coded by Korean EP521318-A2.
                                                                                             ABB60052 standard; protein; Drosophila melanogaster poly WO200171042-A2.
                                                                                                                                                                                                                                                                                                  ADH76500 standard; protein; 727 amino acid human neurot: US2003219774-A1. 27-NOV-2003.
                                                                                                                                                                                                                                                                                                                                                                                             ABU54636 standard; protein; Human NOVX polypeptide #95. WO200281498-A2.
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Herbicidally active polypeptide
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                                                                                 27-SEP-2001.
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                                                                          (PEKE)
                                                                                                                                                              (FARB )
                                                                                                                                                                                                                                                                                                                                                                           (CURA-) CURAGEN CORP.
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                                                                                                                                     Local Similarity
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5.9%;
Similarity 24.3%;
                                                                         PE CORP NY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; protein; 631 AA. associated protein
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5.9%; Score
21.3%; Pred. 1
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5.9%;
21.3%;
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24.3%;
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polypeptide
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; Score
; Pred.
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                      3010 AA.
HCV full cDNA sequence LBC1.
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90;
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1.1e+02;
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1.1e+02;
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1.1e+02;
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Best Local
RESULT 1123
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Best Local Similarity
RESULT 1120
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                                                                                                                                                                                                                                                                                                        WO200277183-A2.
03-OCT-2002.
(ELIT-) ELITRA PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                         ABU17430 standard;
Protein encoded by
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26-DEC-2002.

(HELE/) HELENTJARIS T G.

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Brassica napus fatty acid desaturase, Fad3C, partial sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR53417 standard; protein;
Blood transmiscible NANBHV p
JP06105690-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (LUCK-) LUCKY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADG47920 standard; protein;
Wheat Arabidopsis-like suga;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Portion of a wheat US6383776-B1.
ABB05467 standard; protein; 291 AA.
Coriolus versicolor aldo/ketoreductase protein SEQ ID NO:2.
                                                                                                                                                                                          ABB55033 standard; protein; 285 AA.
Lactococcus lactis protein malG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HITZ/) HITZ W D.
(KINN/) KINNEY A J.
(TING/) TINGEY S V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABU08333 standard; protein;
Wheat sugar transport protei
US2002178468-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DUPO ) DU PONT DE NEMOURS & CO E I.

ry Match 5.9%; Score 70.5;
Local Similarity 21.6%; Pred. No. 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAU97208 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MIAC ) CANADA MIN AGRIC & AGRI-FOOD CANADA.

ry Match
5.9%; Score 70.5; DB 4;
Local Similarity 29.3%; Pred. No. 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS2002199217-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYNE-) UNIV NEWCASTLE VENTURES LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                        INRA INST NAT RECH AGRONOMIQUE h 5.9%; Score 70.0 Similarity 26.1%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALLEN S M.
                                                                                                                                                                                                                                                                                                                                                                                      protein; 275 AA.
Prokaryotic essential gene #2957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein; 228 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sugar transport protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.9%;
26.5%;
                                                                                                                                                                                                                                                                   5.9%;
22.8%;
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21.6%;
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26.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      augar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  228 AA
                                                                      Score 70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               228 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 71;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 70.5; | Pred. No. 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 70.5;
Pred. No. 25;
                                                                                                                                                                                                                                                                     Score 70.5;
Pred. No. 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transport protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                             70.
No.
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25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 2;
7.8e+02;
                                                                                                  DB
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                                                                                             Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   by wrein.pk0006.b4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
RESULT 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity RESULT 1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity RESULT 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity RESULT 1133
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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(WARI/) WARIISHI H.
(KUBI) KUBOTA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NOV10a protein.
US2004162236-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADK68232 standard;
Novel NOVX protein
WO2003085124-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Photorhabdus luminescens WO200294867-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JP2001321171-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (INCY-) INCYTE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CURA-) CURAGEN CORP.
                                                                                                                                                                        BENTO P.
BOLLOG F.
BURGESS C.
CASMAN S.
BOKOR J C.
EDINGER S R.
ELLERMAN K.
FERNANDES E.
GERLACH V.
GROSSE W.
GUNTHER B.
GUSSY V.
HEYES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURAGEN CORP.
                                                                           MALYANKAR U M.
                                                                                                  MACDOUGALL J R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALSOBROOK J.
                                                                                                                                                    TEPLEY D.
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Human protein of the invention NOVS5a W02003102155-A2.
                                                                                                                                                                                                                                                                      28-NOV-2002.
(INSP) INST PASTEUR.
(CNRS) CNRS CENT NAT RECH SCI.
5.9%; Score 70.5; )
                                                                                                                                                                                                                                Human receptor & membrane associated WO2003104395-A2.
                                                                                                                                                                                                                                                      ADH22355 standard; protein; 330 AA.
                                                                                                                                                                                                                                                                                                                                                                     (GENO-) GENOME THERAPEUTICS 5.9%; TY Match 5.9%; t Local Similarity 24.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                       ADA35787 standard; protein; 297 AA.
Acinetobacter baumannii protein #2948
ADR49221 standard; protein;
                                                                                                                                                                                                                                                                                                                                                   ABM70358 standard; protein; 321 AA.
                                                                                                                                                         protein;
#79.
                                                                                                                                                                                      5.9%;
                                                                                                     5.9%;
                   5.9%;
30.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.9%;
29.4%;
                                                                                                                                                                                                                                                                                                                                       protein sequence #3455.
                                                                                                                                                                                                                                                                                                                                                                     S CORP.
; Score 70.5; D
; Pred. No. 36;
                                                                                                                                                                    343
                    Score
Pred.
                                                                                                                                                                                       Score
Pred.
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Pred.
                                                                                                      Score 70.5;
Pred. No. 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         No. 35;
                    No. 44;
                                                                                                                                                                                          70.5;
No. 42;
                                                                                                                                                                                                                                           protein
                                                                        SEQ
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                               Length 343;
                                                                                                               Length
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                                                                                                                                                                                                                                                                                    Length 321;
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                                                                                                                                                                                                                                                                                                                                                                                 297;
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Best RESULT ADD BE BAD US: PD 18 PA (C. PA (H. PA (S. PA (G. PA (
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RESULT
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RESULT 1138
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Best Local (
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07-AUG-2003.
(DECO-) DECODE GENETICS EHF.
5.9%;
ery Match
5.9%;
24.2%;
                                                                                                                                     ADS21429 standard; protein; 3
Bacterial polypeptide #10462.
US2003233675-A1.
                                                                                                                                                                                                        02-SEP-2004.
02-SEP-2004.
(FARB ) BAYER HEALTHCARE AG.
2ry Match
5.9%;
2ry Match
24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADI35077 standard; protein; 365 AA. Human prostaglandin E receptor subtype US2003224393-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FEDE/) FEDER J N.
(MINT/) MINTIER G.
(RAMA/) RAMANATHAN C :
(HAWK/) HAWKEN D R.
                                                                                                                                                                                                                                                                                           ADR67864 standard; protein; Prostaglandin E2 EP3 III. WO2004074830-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human prostaglandin
US6670134-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL15889 standard; protein; 365 AA.
Human prostaglandin EP3 receptor #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Prostaglandin-EP3-9
WO9500552-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ovine melatonin receptor O46608
US2004161823-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIEG/)
(SHEN/)
(SHIM/)
(SMIT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR69518 standard;
                                        (HINK/) HINKLE G
(SLAT/) SLATER S
(CHEN/) CHEN X.
                                                                                                                                                                                                                                                                                                                                                                                                             (ALLR ) ALLERGAN INC. (UYAR-) UNIV ARIZONA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DECO-) DECODE GENETICS EHF.
ry Match 5.9%;
t Local Similarity 24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003064471-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PTGER3 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADR40543 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MERI ) MERCK FROSST
                                                                                                                                                                                                Local Similarity
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1139
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) SHENOY S.
) SHIMKETS R.
) SMITHSON G.
) STONE D.
) VERNET C.
                      GOLDMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VOSS E.
                                                                                                   CAO Y.
                      W
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein; 365 AA.
in isoform, EP3b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CANADA
5.9%;
                                                                                                                                                                                                                                                                                                                                                                      5.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.2%;
      v
    .98
                                                                                                                                                                            366 AA
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Pred. No. 44;
    Score
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Pred. No. 48
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No. 48
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No. 48
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Best Local Similarity
RESULT 1142
ID ADF04358 standard; p
DE Bacterial polypeptid
PN US6605709-B.
PD 12-AUG-2003.
PA (GENO-) GENOME THERAL
                                                                               Best Local Similarity RESULT 1150
                                                                                                                                                                           Best Local Similarity RESULT 1149
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Best Local Similarity
RESULT 1148
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                                                                                     04-DEC-2003.

04-DEC-2003.

(DECO-) DECODE GENETICS EHF.

5-9%;

ery Match 5-9%;

24.2%;
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07-AUG-2003.
(DECO-) DECODE GENETICS EHF.
5-9%;
ery Match
5-9%;
24.2%;
                                                                                                                                                                                                                                                                                                                    Prostaglandin-EP3-21 receptor. W0950052-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                      AAW02683 standard;
G-protein coupled
US5508384-A.
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G-protein coupled
WO9405695-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAE38520 standard; protein; 374 AA.
Human PTGER3 protein isoform, EP3d.
WO2003064471-A2.
                                                       Human prostaglandin
                                                                                                                                       Human prostaglandin US2003224393-A1.
                                                                                                                                                                                                                                   Human PTGER3 protein WO2003064471-A2.
                                                                                                                                                                                                                                                         AAE38513 standard;
                                                                                                                                                                                                                                                                               (MERI ) MERCK FROSST CANADA INC.

ry Match 5.9%; Sco
t Local Similarity 24.2%; Pre
                                                                                                                                                                                                                                                                                                                                                                          (UYNY ) UNIV NEW YORK STATE.

ry Match 5.9%;
t Local Similarity 22.9%;
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ry Match 5.9%;
t Local Similarity 22.9%;
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sry Match 5.9%;
t Local Similarity 24.2%;
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Human prostaglandin E receptor subtype EP3
US2003224393-A1.
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Bacterial polypeptide #471.
          (UYAR-)
                                                       ADL15887 standard; protein; 388 AA.
Human prostaglandin EP3 receptor #2
                                                                                                                                                               ADI35061 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                             16-APR-1996.
            VIND
                        ALLERGAN INC.
            ARIZONA.
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5.9%;
arity 24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                   ; peptide; 379 rat serotonin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; 379 rat serotonin
                                                                                                                                                   protein; 388 AA.
1 E receptor subtype EP3
                                                                                                                                                                                                                                             protein; 388 AA.
in isoform, EP3c.
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2 receptor.
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2 receptor
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No. 5
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No. 50;
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Best Local Similarity
RESULT 1155
ID ADI35067 standard; p
DE Human prostaglandin
PN US2003224393-A1.
RESULT
ID AD
DE Hu
PN WC
PD 02
PA (F
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Best Local Similarity
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Human prostaglandin E receptor subtype EP3
US2003224393-A1.
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Human PTGER3 protei
                                                                                                                                                                                                                               ADL15898 standard; protein; 390 AA.
Human prostaglandin EP3 receptor #4.
US6670134-B1.
                                                                                                                                                                                                                                                                                                                       Human prostaglandin
US2003224393-A1.
                                                                                                                                                                                                                                                                                                                                   ADI35069 standard; protein; 390 AA.
Human prostaglandin E receptor subt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (PARB ) BAYER HEALTHCARE AG.
                                                                                                                                   ADL15885 standard; protein; 390 AA.
Human prostaglandin EP3 receptor #1.
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ry Match 5.9%;
t Local Similarity 24.2%;
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ry Match 5.9%;
t Local Similarity 24.2%;
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                    Human prostaglandin
WO2004074842-A2.
                               ADR70434 standard; protein;
Human prostaglandin E2 EP3 ;
                                                                                                                                                                                         (MILR ) ALLERGAN INC. (UYAR-) UNIV ARIZONA.
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cy Match 5.9%;
Local Similarity 24.2%;
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                                                                                      (MILR) ALLERGAN INC. (UYAR-) UNIV ARIZONA.
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BAYER HEALTHCARE AG.
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In isoform, EP3a2.
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In isoform, EP3al.
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5.9%;
24.2%;
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Pred. No.
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Pred. No. 53;
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Best Local
RESULT 1160
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                                                                      Query Match
Best Local Similarity
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                              AAE38522 standard; pi
Human PTGER3 protein
WO2003064471-A2.
                                                                                                             Human prostaglandin WO200261087-A2.
                                                                                                                         ABP81904 standard; protein; 402
Human prostaglandin E2 receptor
                                                                                                                                                                                      AAW57410 standard; protein;
Human EP3-V receptor.
JP10113185-A.
06-MAY-1998.
                                                                                                                                                                                                                                                                                  Human prostaglandin
US2003224393-A1.
                                                                                                                                                                                                                                                                                            ADI35073 standard; protein; 393 AA.
Human prostaglandin E receptor subtype EP3 (PTGER3)
                                                                                                                                                                                                                                                                                                                                                         Human prostaglandin
US2003224393-A1.
04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                             ADI35081 standard; protein; 393
Human prostaglandin E receptor s
                                                                                                                                                                                                                                                                                                                                                                                                           (DECO-) DECODE GENETICS EHF.

ry Match 5.9%;
t Local Similarity 24.2%;
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Human PTGER3 protein isoform, EP3-VI.
WO2003064471-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PTGER3 protein WO2003064471-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADS76168 standard;
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ry Match 5.9%;
t Local Similarity 24.2%;
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JP10113185-A.
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                                                                                           (LIFE-) LIFESPAN BIOSCIENCES
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h 5.9%;
Similarity 24.2%;
                                                                                                                                                                            ONO PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                               DECODE GENETICS EHF.
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GENETICS EHF. 5.9%;
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EP3 I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein; 393 AA.
in isoform, EP3e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein; 393 AA.
n EP3-VI receptor.
                                        protein; 402 AA.
in isoform, EP3-V
                                                                                                                                                                                                                                         5.9%;
24.2%;
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                                                                      5.9%;
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Pred.
 Score 70.5;
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subtype
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EP3
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No. 53;
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No. 55;
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No. 53;
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No. 55;
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53;
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Best
RESULT
ID AD
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PN US
PD 04
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                                                                                Query Match
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                                                                                                          Human PTGER3 pro
WO2003064471-A2.
                                                                                                                                                                                 Human prostaglandin
US2003224393-A1.
                                                                                                                                                                                                                                              WO2003064471-A2.
07-AUG-2003.
                                                                                                                                                                                                                                                                                                                               Human prostaglandin US2003224393-A1.
                                                                                                                                                                                                                                                                                                                                                                                                     AAE38514 standard; protein;
Human PTGER3 protein isoform
WO2003064471-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human GPCR PTGER3, WO2004040000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein #69 with
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US2003224393-A1.
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                                   Human prostaglandin
US2003224393-A1.
                                                                                                                             AAE38515 standard;
                                                                                                                                                                                                  ADI35071 standard;
                                                                                                                                                                                                                                                                AAE38518 standard; protein; 425 AA.
Human PTGER3 protein isoform, EP3f.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADO29620 standard;
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                                                     ADI35065 standard;
                                                                                       (DECO-) DECODE GENETICS
                                                                                                                                                                                                                                                                                           (DECO-) DECODE GENETICS EHF.
ry Match 5.9%;
t Local Similarity 24.2%;
                                                                                                                                                                                                                                                                                                                                                 ADI35063 standard;
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(VAND-) VAN ANDEL INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2004032842-A2.
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CY Match 5.9%;

Local Similarity 24.2%;
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                                                              Local Similarity
1177
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Local Similarity
1175
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h 5
        DECODE GENETICS
5.
                                                                                                                 ndard; protein; 433 AA.
protein isoform, EP3h.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             increased
                                         protein; 433 AA.
n E receptor subt
                                                                                                                                                                                                                                                                                                                                       protein; 407 AA.
n E receptor subtype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein; 402 AA.
SEQ ID NO:722.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein; 402
ncreased gene
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5.9%;
24.2%;
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ICS EHF.
5.9%;
24.2%;
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24.2%;
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m, EP3g.
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Pred.
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Pred.
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Pred. No. 56;
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70.5; 1
No. 61;
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No.
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No. 59;
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59;
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Query
Best Locc
RESULT 1185
ID ABU2747
DE Prote
PN WO?
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Best Local
RESULT 1184
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Best Local Similarity
RESULT 1183
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ID AAW98431 standard;
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                                                                                                                                    Query Match
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                                                                                                                                                                                                                             (ALLE/) ALLEN S M.
(HITZ/) HITZ W D.
(KINN/) KINNEY A J.
(TING/) TINGEY S V.
                                                                                                                                                                                                                                                                     Wheat sugar trans
US2002178468-A1.
28-NOV-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                         ABU30473 standard; protein encoded by Protein encoded by PW0200277183-A2.
                                                                                                                                                                                                                                                                                                                                          AAU97213 standard; protein; 539 AA. Wheat sugar transport protein encode US6383776-B1.
07-MAY-2002.
(DUPO) DU PONT DE NEMOURS & CO E I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Staphylococcus epidermidis ORF amino US6380370-B1.
ADN22789 standard; protein;
Bacterial polypeptide #5442.
US2003233675-A1.
                                                                       Protein encoded WO200277183-A2. 03-OCT-2002.
                                                                                                                                                       ADG47930 standard; protein; Wheat Beta-vulgaris-like sug US2002199217-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Staphylococcus epidermis polypeptide US2004147734-A1.
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WO9843478-A1.
                                                                                           ABU27418 standard;
Protein encoded by
                                                                                                                                                                                                                                                                                                      ABU08338 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (INMR) MERIEUX ORAVAX PASTEUR (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DOUC/) DOUCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADS06092 standard; protein;
                                                                                                                                               (HELE/) HELENTJARIS
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ry Match 5.9%; Score
t Local Similarity 20.5%; Pred
                                                                                                                        Local Similarity
                                        Local Similarity
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5.9%;
h
Similarity 23.7%;
                                                            ELITRA PHARM
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BUSH D.
                                                                                                                                                                                                                                                                                            transport
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                                                                                           protein; 548
Prokaryotic (
                                                                                                                         5 T G.
5.9%;
26.0%;
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Prokaryotic essential
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                                        5.9%;
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20.5%;
                                                            INC
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                                                                                                                                                                                                                                                                                            protein
                                                                                                                                                                            in; 539 AA.
sugar tran
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in #4.
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                     556 AA
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Pred.
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Pred. No. 70;
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No. 83;
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No. 74;
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                                         70.5;
No. 85;
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No. 83;
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                                                    548;
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Query
Best Lock
RESULT 1190
ID ADJ643'
DE Cart'
PN WO'
PD J'
PA J'
                                                                                                                              Query Matc
Best Local
RESULT 1193
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                          AAG39555 standard; pi
Arabidopsis thaliana
EP1033405-A2.
                                                                                                   ADG47941 standard; protein; 740 Arabidopsis thaliana-like sugar US2002199217-A1.
                                                                                                                                                                              Human prostate cancer antigen WO200055174-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                AAM78767 standard;
Human protein SEQ WO200157190-A2.
                                                                                                                                                                                                                                                                      ABB92892 standard; protein; 700 Herbicidally active polypeptide
                                                                                                                                                                                                                                                                                                                                              ADJ64315 standard; protein; 662 AA. Cartilage differentiation inhibiting protein,
                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADD46023 standard; protein; Rat Protein P23978, SEQ ID W02003016475-A2.
                                                                                                                                                         (HUMA-) HUMAN GENOME SCI INC. (ROSE/) ROSEN C A.
                                                                                                                                                                                                                                                              VO200210210-A2.
                                                                                                                                                                                                                                                                                                                                       WO2004013326-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JS2003143729-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABW02687 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-PEB-2003.
(GEHO ) GEN HOSPITAL
(FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                               .2-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SYNA-) SYNAPTIC PHARM CORP.

TY Match 5.9%;
Local Similarity 20.1%;
                                                                                 HELE/) HELENTJARIS
                                                                                                                                     Local Similarity
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(/) SLATER S
(/) CHEN X.
                                                                                                                                                                                                                                            BAYER AG.
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Similarity
                                                                                                                                                                                                                                                                                                                     ASAHI KASEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; protein; 599 AA.
neuronal GABA transporter (GAT-1)
                                                                                                                                                                                                                                                                                                                                                                                                                        protein; 600 AA.
ID NO 1429.
                                             protein;
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5.9%;
22.7%;
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                                                              T G.
5.9%;
22.8%;
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22.4%;
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25.8%;
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21.1%;
5.9%;
21.3%;
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20.1%;
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NO 11695.
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In fragment
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transport
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70.5; DB 3;
No. 1.3e+02;
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No. 1.
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RESULT 1199
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18-JUL-2000.

(UYOR-) UNIV OREGON HEALTH SCI.

5.9%; Score

14.8%; Pred.
                                                                      Human gravin
US6090929-A.
                                                                               AAB15380 standard; protein; 1780 Human gravin protein sequence.
                                                                                                            (UYOR-) UNIV OREGON HEALTH SCI.

S:YY Match 5.9%; Score

Local Similarity 34.8%; Pred.
                                                                                                                                                    AAW53863 standard; peptide;
Human gravin polypeptide.
US5741890-A.
                                                                                                                                                                                                                                     ADM29274 standard; protein; Human novel protein NOV2b. WO2003064628-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW17057 standard; protein; 1027 Candida albicans chitin synthase W09716540-A1.
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Arabidopsis thaliana
          AAO17365 standard;
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                                                                                                                                                                                                                                                                                                                                 Human NOVX protein
                                                                                                                                                                                                                                                                                                                                           ADK18350 standard;
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WO2003093444-A2.
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ry Match 5.9%;
t Local Similarity 22.3%;
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na protein
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na protein fragment
          protein; 1781 AA
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k ion channel
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.4e+02;
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.4e+02;
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.5e+02;
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Best Local Similarity
RESULT 1212
ID AAG34240 standard; F
DE Arabidopsis thaliana
PN EP1033405-A2.
PD 06-SEP-2000.
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ID ABI
DB And
PN WOG
PD 10-
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Arabidopsis thaliana
EP1033405-A2.
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                                ABB69790 standard; prote
Drosophila melanogaster
                                                                                                                                                   Alloiococcus otitis WO2003048304-A2.
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(INMR) FHONE S.9%;
ry Match 5.9%;
r Local Similarity 21.6%;
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WO200222660-A2.
                                                                                                                                                                    ADB09893 standard; protein;
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In fragment
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n fragment
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NO: 716.
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Protein encoded by I
WO200277183-A2.
03-OCT-2002.
                                                                                                              Human G protein-coupled receptor GPR8. W0200022129-Al.
                                                                                                                                                                                         AAR72985 standard; protein; Epsilon opioid receptor. WO9512670-A1.
                                                          AAY90647 standard; protein;
Human mutant G protein-coupl
                                                                                                                                                                         11-MAY-1995.
(ALCO-) ALCOHOLISM &
                                                                                                                                                                                                                                             02-MAR-2004
(GENO-) GEN
                                                                                                                                                                                                                                                            Streptococcus
US6699703-B1.
                                                                                                                                                                                                                                                                                                                                                                                   06-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                         AAG53761 standard; protein; Arabidopsis thaliana proteir EP1033405-A2.
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                                                   MO200022129-A1.
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h 5.9%; Score
Similarity 18.3%; Pred.
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5.9%; Score
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                                   PHARM
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                 1 INC.
5.9%;
23.6%;
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Prokaryotic (
                                                                                             INC.
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22.5%;
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                                       ABP81897 standard; protein; 333 AA. Human G protein-coupled receptor GPR8 WO200261087-A2.
                                                                                                                     ABJ37874 standard; protein; 333 AA GPR7 ligand related human protein; WO2002102847-A1.
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G protein-coupled r
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(TAKE ) TAKEDA CHEM IND LTD.

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23.6%;
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Human GPR8-ligand related protein #
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Human G-protein receptor 8, GPR
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WO200127632-A2.
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Human GPR8-ligand
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(WILL/) WILLIAMS K
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Human G-protein receptor 8,
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(LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D T
                                                                                                                                                               05-JUN-2003.
(LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D
ADG12852 standard; protein; Human wild-type hGPR8 amino WO2003097795-A2.
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Human GPR8 polypeptide.
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WO2003057236-A1.
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Human GPR8, SEQ ID
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US2003105292-A1.
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US2003105292-A1.
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ry Match
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RESULT 1243
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                                         (OAKL) OAKLEY R H.
(BARA/) BARAK L S.
(LAPO/) LAPORTE S A.
(CARO/) CARON M G.
                                                                                                                                                                                                                                                                                                  Human HA tagged wild-type hgpr8 W02003097795-A2.
                                                                                                                                                                                                                                                                                                                                                                      Human GPR8 ligand protein SeqID W02004080485-Al.
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Human soft tissue :
WO2004048938-A2.
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Human GPCR GPR8, SEQ ID NO:802.
WO2004040000-A2.
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10-JUN-2004.
(PROT-) PROTEIN DESIGN LABS INC.
5.9%; Score
23.6%; Pred.
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ry Match 5.9%;
t Local Similarity 23.6%;
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          ADG12858 standard;
                                                                                        JS2004091946-A1.
                                                                                                Human GPR8-enhanced
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Best Local Similarity RESULT 1251
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RESULT 1256
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                                                                                                                                                                  Query Match
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Mouse GPCR OXTR, SEC
WO2004040000-A2.
13-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RAMA/) RAMANATHAN C
(GOPA/) GOPAL S.
(MINT/) MINTIER G A.
(FEDE/) FEDER J.
                          AAB16787 standard; protein; 475 AA. Human transporter and ion channel-24 W0200192304-A2.
                                                                                                            Photorhabdus luminescens protein sequence WC200294867-A2.
                                                                                                                                                                                                   ADA34110 standard; protein; 470 Acinetobacter baumannii protein
                                                                                                                                                                                                                                                                                                                                                    ABG99947 standard; protein;
Human novel polypeptide #60
WO200274961-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003097795-A2
                                                                                                                                                                                                                                                                          E. faecium protein
US6583275-B1.
                                                                                                                                                                                                                                                                                             ADC96947 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Human protein,
EP1293569-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse oxytocin receptor protein.
US2004086881-A1.
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                                                                                                                                                                                                                                   (GENO-) GENOME THERAPEUTICS
ry Match 5.9%;
t Local Similarity 25.9%;
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                                                                                    (INSP ) INST PASTEUR.
(CNRS ) CNRS CENT NAT RECH SCI.
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(REAS-) RES ASSOC
                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADA54410 standard;
Human protein, SEQ
                                                                                                                                                                                                                                                                                                               Local Similarity
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INCYTE GENOMICS
h 5.
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SEQ ID NO:693.
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BIOTECHNOLOGY.
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ID 1978.
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68;
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78;
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Query Match

Score

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Length 475;

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Query Match
Best Local S
RESULT 1259
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                                                                                           Human diagnostic and therapeutic pprotein MQ2004033973-A2.
                                                                                                                                                                Group B Streptococcus protein sequence WO200006736-A2.
                                                                                                                                                                                                                                                                                                                ABU18262 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                                                                    ABU33453 standard;
Protein encoded by
                                                                                                                                                                                                                                                                                                                                                                                        Human polypeptide
WO200153312-A1.
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WO200212340-A2.
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                                   ADL04660 standard; protein;
M. catarrhalis protein #426.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABM72414 etandard;
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(ELIT-) ELITRA PHARM
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                                                                              (INCY-) INCYTE CORP.
                                                                                                                                                    (MICR-) MICROBIAL TECHNICS LTD.
                                                                                                                                                                                                                                             VO200277183-A2.
                                                                                                                                                                                                                                                                                                (ELIT-) ELITRA PHARM
                                                                                                                                                                                                                                                                                                                                                                     (HYSE-) HYSEQ INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYSH-) UNIV SHEFFIELD
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THERAPEUTICS 5.9%;
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Prokaryotic e
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Prokaryotic esse
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5.9%;
23.1%;
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26.4%;
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25.0%;
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20.1%;
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protein #1654.
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1.2e+02;
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87;
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Best Local Similarity
RESULT 1267
ID AAR53921 standard; pl
DE HCV fusion protein co
PN JP06092996-A.
PD 05-APR-1994.
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RESULT 1272
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                                                          '(MIAC') CANADA MIN AGRIC & AGRI-FOOD CANADA.
'(MIAC') 5.8%; Score 69.5; DB
it Local Similarity 29.3%; Pred. No. 31;
                                                                                                                                                                AAU01288 standard; protein; 218 AA. Brassica napus fatty acid desaturase,
                                                                                                                                                                                                                                                                                                               Novel G protein US2002058306-Al.
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ry Match 5.8%;
t Local Similarity 26.0%;
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Acinetobacter baumannii protein #825
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13-MAY-2003.
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                   ADB09278 standard; protein,
                                                                                                                                                 ۷O200125453-A2.
                                                                                                                                                                                                                                                                                                                                                        ABG60737 standard;
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(SLAT/) SLATER S C.
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                                                                                                                                                                                                                                                                                                                                     receptor
                                                                                                                                                                                                                                                                                                                                                                          N CO.

1%; Score 69.5; D

9%; Pred. No. 29;
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; Score 69.5; I
; Pred. No. 27;
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id 286.
                   247 AA.
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to N-terminal of
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Pred. No.
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Pred.
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Pred.
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Pred. No. 1
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Pred.
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protein
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                                                                                                                                                                                                                                                                                                                                     (nGCPR-x)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GPCR)
                                                                                                                                                                                                                               No. 29;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.
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28;
  SEQ
                                                                                                                                                                  Fad3C,
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2.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16;
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                                                                                                                                                                  partial sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                       210;
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Best Local Similarity
RESULT 1281
ID ABB44525 standard; p
DE Human GPCR3 polypept
PN WO200174904-A2.
                                                                                                                                                                                                    Eest Local Similarity
RESULT 1282
                               Query Match
Best Local Similarity
RESULT 1284
                                                                                                                 Best Local Similarity
RESULT 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity RESULT 1278
                                                                                                                                                                                                                                                                                                                                                                                           RESULT
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                                                                                                                                                                                                                                                                                                                                                   Human olfactory receptor polypeptide, WO200127158-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Streptomyces hygroscopicus ABC transporter. W02003082909-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-APR-2003.

(GENO-) GENOME THERAPEUTICS CORP.

ITY MATCH
5.8%; Scor

22.1%; Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pseudomonas aeruginosa polypeptide US6551795-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB62542 standard; protein; 261 AA. Drosophila melanogaster polypeptide W0200171042-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABG66935 standard; protein; 253 AA.
Novel G-protein coupled receptor related
W0200240539-A2.
AAU95729 standard; protein; 308 AA. Human olfactory and pheromone G proWO200224726-A2.
                                                                                 ABP95703 standard; protein; 308 AA. Human GPCR polypeptide SEQ ID NO 216. W0200216548-A2.
                                                                                                                                                                       Human olfactory WO200168805-A2.
                                                                                                                                                                                  AAU24742 standard; protein; 308 AA.
Human olfactory receptor AOLFR242.
                                                                                                                                                                                                                                                            Human GPCR3 polypeptide WO200174904-A2.
                                                                                                                                                                                                                                                                      ABB44525 standard; protein; 308 AA.
Human GPCR3 polypeptide SEQ ID NO 9
                                                                                                                                                                                                                                       (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2002.
(CURA-) CURAGEN CORP.
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                                                               (NISC-) JAPAN SCI &
                                                                         28-FEB-2002
                                                                                                                                                  (SENO-) SENOMYX INC.
                                                                                                                                                                                                                                                                                                                          L9-APR-2001.
(DIGI-) DIGISCENTS.
(YEDA) YEDA RES &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PEKE ) PE CORP NY.
                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
1280
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1276
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5.8%; S
7 20.9%; P
                                                               TECHNOLOGY CORP
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5.8%;
26.0%;
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20.9%;
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20.9%;
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27.7%;
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21.0%;
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24.2%;
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Pred. No.
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Pred.
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Pred.
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Pred.
                                         Score 69.5;
Pred. No. 50;
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Pred.
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Pred. No. 50;
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Pred. No. 42;
           protein-coupled
                                                                                                                                                                                                                  No. 50;
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50;
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47;
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40;
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          receptor #216.
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Query Match
Best Local S
RESULT 1291
ID ADE37749
DE Yeast ARV
PN US2003186
PD 02-OCT-20
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Best Local Similarity
RESULT 1285
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RESULT 1287
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RESULT 1290
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RESULT 1289
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                                         Yeast An.
US6566512-B1.
20-MAY-2003.
(UCCO) UNIV COLUMBIA NEW YORK.
5.8%; Scor
                                                                                                                                                                                                                                          Query Match
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(NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.
(ADSC-) TECHNOLOGY INCUBATIO.
5.8%; Score 69.5; DB 7;
ery Match
5.0%; Pred. No. 50;
                                                                                                                                                                                                                                                               ABR01671 standard; protein; 316 AA. Human G protein coupled receptor SEQ WO2003000735-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAU85362 standard; protein; G-coupled olfactory receptor WO200198526-A2.
 ADE37749 standard; protein; 321 AA. Yeast ARV1 (ARE-2 Required for viability). US200318687-A1. 02-OCT-2003.
                                                                                                           ADC33485 standard;
Yeast ARV1.
                                                                                                                                                                                     Chlamydia pneumoniae WO9927105-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GPCR3 prot-
US2003195335-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GPCR protein EP1270724-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-2002.
(CHEM-) CHEMCOM SA.
                                                                                                                                                                            03-JUN-1999
                                                                                                                                                                                               AAY35360 standard; protein; 321 AA.
Chlamydia pneumoniae involved in the virulence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABW02126 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADC86333 standard;
                                                                                                                                                                                                                               (DECO-) DECODE GENETICS EHF.
TY Match 5.8%;
t Local Similarity 20.9%;
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                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             GROSSE W M.
SZEKERES E S.
CASMAN S.
ALSOBROOK J P.
BURGESS C E.
                                                                                                                                                                                                                                                                                                                                                                SHENOY S.
KEKUDA R.
GANGOLLI E A.
STONE D J.
                                                                                                                                                                                                                                                                                                                                         SMITHSON G. MACDOUGALL J
                                                                                                                                                                                                                                                                                                                                                                                                                    PADIGARU M.
TAYLOR S.
TCHERNEV V T.
SPYTEK K A.
                                                                                                                                                                GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein; 308 AA. SEQ ID NO:786.
                                                                                                                     protein;
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20.9%;
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20.9%;
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21.4%;
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or #223.
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Pred.
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Pred.
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Pred.
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Pred.
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Pred. No. 50;
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No. 52;
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                                                                                                                                                       321;
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Best
RESULT 1
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RESULT 1294
ID ADMICS
RESULT
ID ADI
DE Dro
PN WO:
PD 09
PA (DI
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Best L
RESULT 1
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Best Local Similarity
RESULT 1292
                                                                                                                                                                             Best Local Similarity
RESULT 1298
ID ABB47613 standard;
DE Listeria monocytoge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity RESULT 1293
                                                      Query Match
Best Local S
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                                                                                                                                                                                                                                        Human lysophosphatidic acid US6485922-B1.
                                                                                                                                                                                                                                                                                                                                                  22-APR-1999.

(LXRB-) LXR BIOTECHNOLOGY INC.

(LXRB-) LXR BIOTECHNOLOGY INC.

5.8%; Score 69.5; 1

31Y Match
20.2%; Pred. No. 67;
                                                                                          ABU32698 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                                                                                                                                   LPA receptor-related amino acid sequence WC200112838-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rat Sprague-Dawley putative WO2003104484-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAU53139 standard; protein; 327 AA. Propionibacterium acnes immunogenic protein #14035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYCO) UNIV COLUMBIA NEW YORK.
5.8%; Score
                                                                                                                                                                    Listeria monocytogenes WO200177335-A2.
                                                                                                                                                                                                                                                                                                                                                                                                  Human EDG-2 p
WO9919513-A2.
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                                                                                                                                                                                                                         (ATAI-) ATAIRGIN TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                   (ATAI-) ATAIRGIN TECHNOLOGIES INC.
ry Match 5.8%; Score
t Local Similarity 20.2%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003033515-A1.
24-APR-2003.
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                                   ADL12060 standard;
                                                                                                                                                 (INSP ) INST PASTEUR.
                                                                                                                                                                                                                                                                                                                                                                                                                   AAY05489 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH10684 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (META-) METABOLEX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABM49658 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORI-) CORIXA CORP
                                                                                                                              Local Similarity
                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match
                                                                         T-) ELITRA PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                     cal Similarity
                 03002137-A2.
DEVELOGEN ENTWICKLUNGSBIOLOGISCHE FORSCH.
                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acnes
                                                                                                                                                                            protein; 400 AA.
enes protein #317
                                   protein;
                                                                                                   protein; 400
Prokaryotic
                                                      5.8%;
22.9%;
                                                                                                                              5.8%;
22.9%;
                                                                                                                                                                                                         5.8%;
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22.0%;
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(LPA) receptor
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54;
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PESULT 1310
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RESULT 1309
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RESULT 1301.5
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RESULT 1305
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                                                                                                                                                                          Streptococcus pneumoniae pro US6699703-B1 02-MAR-2004.
                                                                                                                                                                                                                                                   Arabidopsis thaliana protein fragment Ep1033405-A2.
                                                                                              Novel S. pneumoniae
US6800744-B1.
05-OCT-2004.
(GENO-) GENOME THERA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABB66992 standard; protein; 428 AA. Drosophila melanogaster polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster WO200171042-A2.
                                                         AAG30874 standard;
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                                                                                                                                                                                                                                                                                                                                                                   (DEVE-) DEVELOGEN ENTWICKLUNGSBIOLOGISCHE sry Match 5.8%; Score 69.5; t Local Similarity 20.9%; Pred. No. 79;
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h 5.8%; Score 69.5;
similaritv 20.9%; Pred. No. 75;
                                                                           GENOME THERAPEUTICS 5.8%; Similarity 24.4%;
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23.6%;
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r polypeptide
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protein,
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encoded by
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fragment
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No. 91
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No. 87;
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Query Match
Best Local Similarity
RESULT 1311
ID ADS28512 standard; p
DE Bacterial polypeptid
PN US200323675-A1.
PD 18-DEC-2003.
PA (CAOY/) CAO Y.
PA (HINK/) HINKLE G J.
PA (CHEN/) CHEN X.
PA (GOLD/) GOLDMAN B S.
                                                                                                                                                                                                                                                                                                                             Best
RESULT
ID AA
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ID AD
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PN US
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                       Query Match
Best Local Similarity
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                     WOZOUVEZZO.

04-MAY-2000.

(CONN-) CONNAUGHT LAB LTD.

5.8%;

TO Match 5.8%;

21.4%;
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C. pneumoniae CPN100557 processe
WO20024765-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003233675-A1.
                                                            WO200024765-A2.
                                                                                                                                ADR13717 standard;
Amidase, SEQ ID 54.
WO2004069848-A2.
                                                                                                                                                                                                                                                        EP1033405-A2.
06-SEP-2000.
                                                                                                                                                                                                                                                                         AAG30873 standard; protein; Arabidopsis thaliana protein
                                                                                                                                                                                                                                                                                                                                    AAY41278 standard; protein; 500 AA. Fusion protein containing rabbit prostaglandin w09953033-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADS28512 standard; protein;
Bacterial polypeptide #1754;
US2003233675-A1.
ABU26764 standard;
Protein encoded by
                                                                             AAY92828 standard;
                                                                                                                                                                                             04-MAY-2000
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(UYVA-) UNIV VANDERBILT.
                                                                                                                                                                                                                                                                                                                                                                                                                    Klebsiella
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                                                                                                                (DIVE-) DIVERSA CORP.
                                                                                                                                                                                   (CONN-) CONNAUGHT LAB
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(SLAT/) SLATER S
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pneumoniae polype
                                                                    dard; protein; 547 AA. CPN100557 antigen.
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protein; 547
Prokaryotic
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polypeptide s
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7 processed a
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n fragment
         547
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99;
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RESULT 1326
ID ADE097
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                                                               ADE09321 standard; protein; 
Novel protein-related contig
W02003054152-A2.
03-UU--2003
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human diagnostic protein #3020. W0200175067-A2.
                                                                                                                                                                                                                                                          ABB82980 standard; protein;
Human SLC22A related proteir
W0200299053-A2.
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03-OCT-2002.
(ELIT-) ELITRA PHARM
                                                                                                                                                                       ABO07242 standard; protein;
Human p53 modifying protein,
WO200299122-A1.
                                                                                                                                                                                                                                                                                                                                      WO200299053-A2.
                                                                                                                                                                                                                                                                                                                                                          ABB82979 standard; protein; 557 AA.
Human SLC22A related protein-GenBank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human carnitine WO200014210-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY83929 standard; protein;
Human carnitine transporter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAR-1999.

(CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.

5.8%; Score 69.5; DB 2;

YMATCH

5.8%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A protein with cation transporting WO9913072-A1.
Novel protein-related WO2003054152-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY01650 standard; protein; 557
                     ADE09261 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                (HYSE-) HYSEQ INC
                                                                                                                                                                2-DEC-2002
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5.8%;
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Similarity 23.6%;
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Prokaryotic (
                     protein; 557
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26.3%;
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21.4%;
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26.3%;
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protein-GenBank
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           contig
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protein
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          polypeptide
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e 69.5; DB 3;
. No. 1.1e+02;
                                                                                                                               69.5;
No. 1
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No. 1.
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No. 1.
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No. 1.1e+02;
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No. 1.1e+02;
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                                             . <u>.</u>5
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.1e+02;
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.1e+02;
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                                                                                                                               DB 6;
.1e+02;
                                            DB 7;
1e+02;
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           sequence
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Best Local Similarity
RESULT 1329
ID ADA34637 standard, p
DE Acinetobacter bauman
PN US6562958-B1.
PD 13-MAY-2003.
PA (GENO-) GENOME THERA
Best
RESULT
ID AA
DE Hu
PN WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                     Human protein encoded by clone TESTI20271790. Ep1308459-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-AUG-2003.

(GENO-) GENOME THERAPEUTICS CORP.

S.8%; Score 69.9

XY Match
23.6%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAY-2003.
13-MAY-2003.
(GENO-) GENOME THERAPEUTICS CORP.
FIX MARCH
5.8%; SCORV.
5.0%; Pred
20.2%; Pred
                                                                                                                                                                               ABU32703 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                                                                                Listeria monocytogenes protein #114 W0200177335-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB89665 standard; protein; 568 AA. Human polypeptide SEQ ID NO 2041. WO200190304-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRO polypeptide SEQ WO2004041170-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADP23817 standard; protein; 55 PRO polypeptide SEQ ID NO:995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABO62908 standard; protein; 564 AA.
Klebsiella pneumoniae polypeptide s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA34637 standard; protein; 559 AA.
Acinetobacter baumannii protein #1798.
                                                                                                 ABP65234 standard; protein; 599 AA.
Hypoxia-regulated protein #108.
                     AAE38584 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS6610836-B1.
                                          (OXPO-) OXPORD BIOMEDICA UK LTD.
cy Match
Local Similarity 19.6%; Pre
                                                                                                                                                                                                                                                                                                                                         (HELI-) HELIX RES INST.
(REAS-) RES ASSOC BIOTECHNOLOGY.
                                                                                       0200246465-A2.
                                                                                                                                                        ELIT-) ELITRA PHARM INC.
                                 Local Similarity
                                                                                                                                                                                                                                                                                                         Local Similarity
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         ca; protein;
transporter
                                                                                                                                                                                         protein; 579
Prokaryotic e
                                                                                                                                                                                                                         5.8%;
21.1%;
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22.7%;
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22.4%;
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21.1%;
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26.3%;
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26.3%;
         protein.
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                                           Score 69.5
Pred. No.
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Pred. No.
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Pred. No. 1.
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Pred. No. 1.
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essential
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5. 1.2e+02;
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. 1.1e+02;
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.1e+02;
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                                                                                                                                    DB 6;
.2e+02;
                                                                                                                                                                                         gene
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                                                                                                                                                579;
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Query Match Best Local Similarity
RESULT 1337
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                                                                                                       Best Local Similarity RESULT 1344
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RESULT 1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity RSULT 1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                      Staphylococcus epidermis polypeptide US2004147734-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY41285 standard; protein; cI-77A-TL fusion protein encw09953033-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-JUL-2003.
(MILL-) MILLENNIUM PHARM INC.
ADO09827 standard; protein; 681 AA.
Hamster SGLT homologue protein SEQ ID NO:50.
                                                                                   ADQ96536 standard; protein; or cell activation associated
                                                                                                                                                                     ADJ64317 standard; protein; 663 AA. Cartilage differentiation inhibiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Staphylococcus
US6380370-B1.
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(FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003016475-A2.
27-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADD46025 standard; protein; 599 AA.
Human Protein P30531, SEQ ID NO 11697.
                                                                                                                                                                                                                                               US2003175787-A1.
                                                                                                                                                                                                                                                                                                             (INCY-) INCYTE PHARM INC
                                                                                                                                                                                                                                                                                                                                          AAY17390 standard; protein; 663 AA.
Human vesicle membrane protein-like
                                                                                                                                                                                                                                                                                                                                                                                               (DOUC/) DOUCETT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABP40194 standard;
                                                                                                                                       (ASAH ) ASAHI KASEI
                                                                                                                                                                                                                                                          Human vesicle membrane
                                                                                                                                                                                                                                                                    ADM83092 standard;
                                                                                                                                                                                                                                                                                                                                   WO9921994-A2.
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                                                                                                                                                                                                                          INCYTE CORP
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epidermidis (
                              I PHARMA CORP.
5.8%; Score (
22.0%; Pred. I
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19.6%;
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27.2%;
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22.0%;
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22.0%;
                                                                                                                                                                                                                                                        tein; 663 AA.
protein (VMP)2.
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encoded by
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ORF a
                                                                                 663 AA.
d protein
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Pred.
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No. 1.
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No. 1.3e+02;
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                                DB 8;
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.4e+02;
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.4e+02;
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.4e+02;
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.4e+02;
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.4e+02;
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.4e+02;
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                                                                                                                                                                       SEQ
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                                                                                                                              663;
                                                                                                                                                                                                                                                                                                                                                                                         660;
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Match

Mest Local Similarity

RESULT 1350

ID ABB98140 stand

DE Human PMM**

PN WO20**
                                                                                                                                                                                                                                                                                    RESULT 1349
ID AAY7024
DE Human P
PN WO20001
PD 09-MAR-
PA (BGHM)
                RESULT
ID AD
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RESULT 1348
                                                                                                Query
Best I
                                                                                                                                                                                                     Query Match
Best Local
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                                                          Bacterial polypeptide #22547
US2003233675-Al.
                                                                                                               (UYTE-) UNIV TENNESSER R
(BECK/) BECKER J M.
(HAUS/) HAUSER M.
(DONH/) DONHARDT A.
(BARN/) BARNES D.
                                                                                                                                                                                                                                                                                                    AAY70245 standard;
Human Polycystin-L
WO200012046-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABU41908 standard;
Protein encoded by
WO200277183-A2.
                        (HINK/) HINKLE G (SLAT/) SLATER S (CHEN/) CHEN X.
                                                                                                                                                                                                                                                                                                                                                                      ABU43821 standard; protein; 801 protein encoded by Prokaryotic w0200277183-A2.
                                                                                                                                                                 AAY96168 standard; protein; 
Saccharomyces cerevisiae OPT
WO200052162-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Maize oil-associated gene pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-OCT-2002.
(ELIT-) ELITRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2004039405-A1
                                                                                                                                                                                                   (INCY-) INCYTE GENOMICS INC.
ry Match 5.8%;
t Local Similarity 19.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JS2004025202-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                      LAUR/) LAURIE C C.
(RAVA/) RAVANELLO M.
(SAVA/) SAVAGE T.
                                                                                                                                                                                                                                                                                                                                                      ELIT-) ELITRA PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                        ROGE/) ROGERS J A.
                                                                                          Local Similarity
1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                EDE/) LEDEAUX J R.
                                                                                                           Match
                                                                                                                                                                                                                                                                                                                                     ocal Similarity
                                                                                                                                                                                                                                                                                                                                                Match
                                                                                                                                                                                                                                                                    BRIGHAM & WOMENS HOSPITAL h 5.8%; Score Similarity 20.4%; Pred
Similarity
               GOLDMAN B S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAKEDA CHEM
                                                 CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        LAURIE C C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PHARM
                                9
                                                                                                                                                                                                                                            ip 7484157CD1.
                                                                                                                                                                                                                                                                                                             protein; protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; 695 AA.
Prokaryotic essential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IND LTD.
5.8%;
24.5%;
                                                                                                                                                                                                                                                                                                                                     M INC.
5.8%;
19.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 INC.
5.8%;
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21.0%;
                                                                                                  5.8%;
22.7%;
225
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. 8 %;
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protein #
                                                                                 877
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T protein
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e 69.
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69.5;
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.8e+02;
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.5e+02;
                                                                                                  DB 3;
.1e+02;
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.5e+02;
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DB 8;
1e+02;
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.9e+02;
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        877;
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Best Local Similarity
RESULT 1354
ID ABU16635 standard; p
DE Protein encoded by P
PN W0200277183-A2.
PD 03-OCT-2002.
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ID AAG7076
DE S Cerev
PN WO20010
PD 11-JAN-
PA (JANC)
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RESULT 1355
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US6562958-B1.
13-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                             hABC3 protein.
WO9702346-A2.
23-JAN-1997.
                                                                                                                               ADJ70414 standard; protein; 1704 Human heat mitochondrial protein WO2003087768-A2.
                                                                                                                                                                                                                                                                                                                                                                          AAW46761 standard; protein; 1684 AA. Amino acid sequence of human ATP binding W09748797-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAG70761 standard;
S cerevisiae apopt
WO200102550-A2.
                                                ADL61289 standard;
Human ATP-binding
                                                                                                 (MITO-) MITOKOR.
(BUCK-) BUCK INST
                                                                                                                                                                                                              Homo sapiens l
EP1217066-A1.
                                                                                                                                                                                                                                                                                                      AAW46771 standard; protein; 1704
Amino acid sequence of human ATP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GENO-) GENOME THERAPEUTICS 5.8%; t Local Similarity 24.7%;
                                                                                                                                                                                                     26-JUN-2002.
                                                                                                                                                                                                                                  ABP52094 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW25671 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADA34462 standard; protein; 1028 AA.
Acinetobacter baumannii protein #1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ELIT-)
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                                                                                                                                                                                           (UYGE-) UNIV GENT.
                                                                                                                                                                                                                                                                                                                                                        (GENZ)
(BRIM ) BRISTOL-MYERS SQUIBB 5.8%; Cy Match 5.8%; Local Similarity 20.3%;
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                                                                            Local Similarity
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ABC transporter ABCA3 p
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5.8%;
city 24.4%;
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                                                 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 1684 AA.
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Prokaryotic essential
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sis associated p
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5.8%;
24.7%;
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subfamily
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No. 5.
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No. 2.
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  DB 8;
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.4e+02;
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.4e+02;
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.4e+02;
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.3e+02;
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.3e+02;
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.7e+02;
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.6e+02;
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.le+02;
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RESULT
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Human ovary-specific O1-236 (NPM2)
WO200288314-A2.
                                                                                                                                                                                                                                                 AAB21047 standard; protein; Human nucleic acid-binding pw0200044900-A2.
                                                                                              Human nucleoplasmin WO2003091400-A2.
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WO2003048304-A2.
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                  EP1347046-A1.
                        ADM03849 standard; protein; 214 AA. Human protein of the invention SEQ
                                                                   (BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                      ABM62108 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Propionibacterium
                                                                                                                 ADJ63172 standard;
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(AMHP ) WYETH.
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                                                                                                                                                                                                                                                                                                                                       AAW38633 standard;
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WO2003033515-A1.
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ASSOC BIOTECHNOLOGY.
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protein.
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n (Npm2) protein.
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antigenic protein
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27.3%;
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24.7%;
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24.7%;
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26.6%;
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immunogenic
                                                                                                                                                                                                                                                                                                                                                                                                            permease/transporter-related
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protein,
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Query Match
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RESULT 1377
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RESULT 1379:
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                                                                Human pituitary-derived G protein-coupled W09859962-A1.
                                                                                                                                                AAW95181 standard; peptide; 370 AA. Human G-protein coupled rceptor polypeptide. W09849295-A1.
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(INSP) INST PASTEUR.
(CNRS) CNRS CENT NAT RECH SCI.
5.8%; Score
19.8%; Pred.
           AAG04119 standard;
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Human G protein-coupled receptor
WO9724436-A2.
                                                                                                                                                                                                                                                                                                               Human pituitary WO9605302-A1.
                                                                                                                                                                                                                                                                                                                         AAR91218 standard; protein;
Human pituitary G-protein co
                                                                                                                                                                                                                                                                                                                                                                          06-SEP-2000.
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Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Staphylococcus aureus WO200294868-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABM72781 standard; protein; 350 AA. Staphylococcus aureus protein #2021.
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                                                   (TAKE ) TAKEDA CHEM
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kodakaraensis
protein; 370 AA.
na protein fragment
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                                                                                          Bacterial polypeptide #23659.
US2003233675-Al.
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                                                                                                                                                                                                                                                                                                                                          AAW27510 standard; protein; Consensus human hypothalamic W09708317-A2.
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ABO61901 standard; protein; 472 AA. Klebsiella pneumoniae polypeptide s US6610836-B1. 26-AUG-2003.
                                                                                                                                                                 ABU14818 standard; protein; 388 AA. Protein encoded by Prokaryotic essential
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Human GPCR GPR10, S
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13-MAY-2004.
(PRIM-) PRIMAL INC.
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(LIPE-) LIFESPAN BIOSCIENCES
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                                                   Human dJ37C10.3 ATPase WO200157188-A2. 09-AUG-2001. (HYSE-) HYSEQ INC.
                                                                                                                          Arabidopsis thaliana protein EP1033405-A2. 06-SEP-2000.
       AAM79751 standard;
Human protein SEQ
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Drosophila melanogaster dmKSNF.
WO200149948-A2.
12-JUL-2001.
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EP1033405-A2.
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Human protein |
WO200157190-A2
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Arabidopsis thaliana proteir
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(HYSE-) HYSEQ INC
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Human ORFX ORF2543
WO200058473-A2.
ADH85829 standard; protein; 178 AA.
Enterococcus faecalis polypeptide #
US6617156-B1.
                                                                                                    ADM68764 standard; protein; 5127 AA. Peregrinus maidis ryanodine receptor
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WO200218424-A2.
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Human putative spliceosome associated protein (SAP)
US2003068803-A1.
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Human polypeptide SEQ ID NO
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(CURA-) CURAGEN CORP.
                                            (DUPO) DU PONT DE NEMOURS & CO E I.
ry Match 5.8%; Score 69;
Local Similarity 20.1%; Pred. No.
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1.7e+02;
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7.3e+02;
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2.5e+02;
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2.4e+02;
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1.7e+02;
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2.8e+03;
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9.2e+02;
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Best Local Similarity RESULT 1408.
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RESULT 1416
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(DOUC/) DOUCETTE-STAMM L
(BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAG53772 standard; protein; Arabidopsis thaliana proteir EP1033405-A2.
                           ABB99751 standard; protein; 327 AA. Amino acid sequence of bacteriophage W0200295413-A2;
                                                                                                    Protein encoded WO200277183-A2
                                                                                                              ABU29281 standard;
Protein encoded by
                                                                                                                                                                              ADA14398 standard; protein; 278 AA. Mouse spermatogenesis related protein W02003068959-A1.
                                                                                                                                                                                                                                                                 ADO57686 standard; protein; 227 AA.
Actinobacillus actinomycetemcomitans
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                                                                                    (ELIT-) ELITRA PHARM
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UNIV BRITISH COLUMBIA.
5.7%; Score
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MATCH

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ID ABM8549
DE Mouse po WO2003(
PD 12-SEP-
PA (SAGR-)
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RESULT 1420
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30-MAR-2000.
                                                                                  Rat-edg, G-protein
US5856443-A.
                                                                                                                                                                                                                                    p(rat-edg),
US5585476-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAE13430 standard; protein; 377 AA. Brassica napus microsomal omega-3 d WO200179499-A1.
                                                                                                                                                                                                                                                                                                                                                                                     Mouse cancer ass
WO2004074321-A2.
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WO9704094-A1.
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Mouse EDG1 polypeptide.
WO200059529-A1.
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TY Match 5.7%; Score
Local Similarity 29.3%; Pred.
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Similarity 19.8%;
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sin coupled receptor.
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RESULT 1426
ID ABU6181
DE Rat-edg
PN US65184
PD 11-FEB-
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Best Local Similarity
RESULT 1432
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NESULT 1430
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28-DEC-1995.
(MASS-) MASSACHUSETTS GEN HOSPITAL.
EXAMPLE 15.7%; SCORE
EXAMPLE 18.8%; Pred.
                                                                                                                                                                                                        Angiotensin converting enzyme (ACEV) W0200136632-A2.
                                         Human therapeutic WO2004080148-A2.
                                                                                                                                                                                                                                                                                                                                                                                      AAR88409 standard; protein; 420 A
High-affinity melatonin receptor.
WO9535320-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB68619 standard; protein; 411 AA.
Human PAC 1 receptor isoform 30.
WO2001.07478-A1.
01-FEB-2001.
                                                                                                                            US6562958-B1.
                                                                                                                                    ADA33815 standard; protein; 437 Acinetobacter baumannii protein
                                                                                                                                                                                                                                                                                                  Salmonella enterica WO9850531-Al.
                                                                                                                                                                                                                                                                                                                        AAW88344 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH87117 standard; protein; 417 Enterococcus faecalis polypeptic US6617156-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human diagnostic WO200175067-A2.
                                                             ADS12084 standard;
                                                                                                                                                                                                                                                                              (UNSY ) UNIV SYDNEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DOUC/) DOUCETTE-STAMM L A. (BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MEDI-) MEDICAL RES COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US6518414-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABU61817 standard;
                                                                                                                                                                                           (COMP-) COMPUGEN LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABG07020 standard;
                     (NUVE-) NUVELO INC.
                                                                                                                   L3-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                               ocal Similarity
                                                                                 GENOME THERAPEUTICS CORP.

5.7%; Score 68.5;
Similarity 20.5%; Pred. No. 1.
 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HYSEQ INC.
                                                  ; protein; contig pro
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29.9%;
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29.9%;
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19.8%;
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5.7%;
19.6%;
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                                                   protein
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#976.
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                                                                                                                                                                       No.
                                                                                                                                                                                                                                                         68.5; DB
No. 1e+02;
                                                                                                                                                                                                                                                                                                                                            68.5;
No. le+
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No. 1e+02;
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.1e+02;
 DB 8;
.1e+02;
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+02;
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                                                                                               437;
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Star Bankley

Human PACAP

mature

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HOSPIN
BAYER AG.

Hest Local Similarity
RESULT 1441

ID ADJ65810 stand
DE Human corr
PN US200
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ID AAB71866 standard; p
DE Human CRP1 seven tra
PN W0200109328-A1.
PD 08-FEB-2001.
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RESULT
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             02.JAN-2003.

(NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATI

(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATI

5.7%; Score 68.5; DB 7;

51 Local Similarity 23.7%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human CRF-RA2 splice variant US2002055617-A1.
                                                                                                                                                                                                                                                                                                                                                                                        ABG76402 standard; protein; 444 Human hCRF-RA1, splice variant.
                                                                                                                                                                                     ADJ65810 standard; protein; 444 AA.
Human corticotropin-releasing factor receptor CRF-RA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human corticotropin-releasing US6495343-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABR43052 standard; protein; 444 AA.
Human CRH-R1 beta protein SEQ ID NO:2.
AAR58668 standard; protein; 448
                                                                                         ADC86255 standard; protein; 447 AA.
Human GPCR protein SEQ ID NO:708.
                                                                                                                                                                                                                                                                                   WO2003016475-A2.
                                                                                                                                                                                                                                                                                             ADE62734 standard; protein; 4
Human Protein P34998, SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                       Human hCRF-RA1, splice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABU08081 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human CRH-R1 beta
WO2003024990-A2.
                                                                                                                           (SALK ) SALK INST BIOLOGICAL 5.7%; CY Match 5.7%; Local Similarity 23.7%;
                                                                                                                                                                                                                                                                                                                                                                            JS6482608-B1.
                                                                                                                                                                                                                                              GEHO ) GEN HOSPITAL
FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYTE-) UNIV TENNESSEE RES (5.7%;
Y Match 5.7%;
Local Similarity 23.7%;
                                                                                                                                                                                                                                                                                                                    Local Similarity
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1438
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/) CHEN R.
/) LEWIS K A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MILLENNIUM
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h 5.7%; Score 68.5;
Similarity 23.7%; Pred. No. 1.
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5.7%; Score 68.
y 23.7%; Pred. No.
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5.7%;
y 23.7%;
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23.7%;
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NO
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ng factor receptor 2
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Pred. No. 1.
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5. 1.1e+02;
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.1
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1.1e+02;
                                                                                                                             5; DB 8;
1.1e+02;
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1.1e+02;
                                             INCUBATIO.
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.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                            DB 6;
.1e+02;
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.1e+02;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
      (HINK/) HINKLE G (SLAT/) SLATER S (CHEN/) CHEN X.
                                                     Bacterial polypeptide #6813. US2003233675-A1.
                                                                                                                                                                                       (TAKE) TAKEDA CHEM IND LTD.
xy Match 5.7%;
t Local Similarity 29.9%;
                                                                                                                                                                                                                                 AAR58671 standard; protein; 476 AA. Human PACAP receptor type 1C mature EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                          02-JAN-2003.
02-JAN-2003.
(NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY (NADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBAT: Score 68.5; DB 7 yry Match 29.9%; Pred. No. 1.2e+02 st Local Similarity 29.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PACR seven transmembrane WO200109328-A1. 08-FEB-2001.
                                                                                                                                                         AAR58669 standard; protein; 4
Human PACAP receptor type 1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human GPCR protein EP1270724-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Non-endogenous human WO200177172-A2.
                                                                                                                                                EP618291-A2.
                                                                                                                                                                                                                                                                          (TAKE) TAKEDA CHEM IND LTD.
ry Match 5.7%;
t Local Similarity 29.9%;
                                                                                                                                                                                                                                                                                                                     EP618291-A2.
                                                                                                                                                                                                                                                                                                                              AAR58670 standard; protein; 475 AA.
Human PACAP receptor type 1-B2 matu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PHARM INC.

27 Match
5.7%;
t Local Similarity 29.9%;
                                                                                                                                                                                                                                                                                                                                                                                                         Human GPCR ADCYAP1R1,
WO2004040000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                              ADO29153 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB56380 standard; protein;
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                                                                                                      Local Similarity
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5.7%;
Similarity 29.9%;
                                                                                                                                                                                                                                                                                                                                                                                     PRIMAL INC.
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GOLDMAN B
                                         CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          receptor
                  0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein; 468 AA. SEQ ID NO:638.
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5.7%;
29.9%;
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29.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID
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¿ protein,
                                                                                                                                                         476 AA.
B mature
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D NO:254.
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Pred.
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Pred.
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                 mature
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.2e+02;
                                                                                                       DB 2;
.2e+02;
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.2e+02;
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.2e+02;
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.le+02;
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.2e+02;
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.2e+02;
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Best L.-
BEST 1455
ID ABU086*
ID Human
PN US20'
PD 05-'
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Gest Local Similarity

RESULT 1453

ID AAB6861.8 stand
DE Human PAC
PN WO200
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RESULT 1452
ID ABP65829 stand
DE Bifidober
PN EP12
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ID AB
DE Hu
PN US
PD 16
PA (H
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RESULT 1457
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ID AB
DE Hu
PN WO
PD 08
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Best
                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-OCT-1994.

05-OCT-1994.

(TAKE) TAKEDA CHEM IND LTD.

(TAKE) TAKEDA CHEM IND LTD.

5.7%;

ery Match 5.4milarity 29.9%;
                                                                                                                                                                                                                                                                                                                   Cancer/angiogenesis/fibrosis-related polypeptide, WQ2003042661-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JUL-2002.
31-JUL-2002.
(NEST) SOC PROD NESTLE SA.
(NEST) SOC PROD NESTLE SA.
5:7%;
EYY Match 5:7%;
28:6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABP65829 standard; prot
Bifidobacterium longum
EP1227152-Al.
ABO34523 standard; protein; 548 AA. Region of human secreted protein en US2003049618-A1.
                                                                                             Human novel secreted protein #150. US6420526-B1.
                                                                                                                                                                                                  ABP73995 standard; protein; 541 candida albicans essential prote WO200253728-A2.
11-JUL-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                            ABP81873 standard; protein;
Human PACAP receptor type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABU08611 standard; protein; 525 AP Human pituitary adenylate cyclase US2002182729-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR58659 standard; protein; thuman PACAP receptor type 1A EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB68618 standard; protein;
Human PAC_1 receptor.
                                                                              (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                         (BLIT-) ELITRA PHARM INC.
ry Match 5.7%;
Local Similarity 21.7%;
                                                                                                                                                                                                                                                                                                                                                                                                      08-AUG-2002.
(LIFE-) LIFESPAN BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                WO200261087-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DICI/) DICICCO-BLOOM (NICO/) NICOT A. (LUNN/) LU N.
                                                                                                                                                                                                                                                                                             2-MAY-2003.
EOSB-) EOS BIOTECHNOLOGY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDI-) MEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUHJ/) SUH J.
                                                                                                                                                Local Similarity
1459
                                                                                                                                                                                                                                                       Local Similarity
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ngum NCC2705 (
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29.9%;
                                                   5.7%;
34.0%;
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29.9%;
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protein
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Pred.
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Pred. No.
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Pred. No.
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 68.5; DB 8;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORF
               encoded
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                                                  No.
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                                                                                                                                                                                                                                                                    3.5; DB 7;
5. 1.4e+02;
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b. 1.4e+02;
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1.
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. 1.4e+02;
                                                                                                                                                              .5; DB 5;
.1.4e+02;
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.4e+02;
             λą
                                                   DB 5;
.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 5;
.3e+02;
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RESULT 1463
ID ADH7418
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RESULT 1461
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Best Local Similarity
RESULT 1462
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(ROSE/) ROSEN C A.
(SOPP/) SOPPET D R.
(CART/) CARTER K C.
(BEDN/) BEDNARIK D P.
(ENDR/) ENDRESS G A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-MAR-2003.
(RUBE/) RUBE
(ROSE/) ROSE
(SOPP/) SOPP
(CART/) CART
           ADH74186 standard; protein;
Human secreted protein #150
US2003225248-A1.
                                                                                                       WO2003097854-A2.
27-NOV-2003.
                                                                                                                                   ADH17089 standard;
Human translation
                                                                                             (SUGE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADI23184 standard;
Novel human secret
                                                                                                                                                                                                     (KYAW/)
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(ENDR/)
(YUGG/)
                                                                                                                                                                                                                                             (LAFL)
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                                                                                                                                                                                                                               (TIYY)
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                                                                 Local Similarity
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KYAW H.
                                                                                                                                                                                                                                                                  FLORENCE K A.
OLSEN H S.
FISCHER C L.
EBNER R.
BREWER L A.
MOORE P A.
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KYAW H.
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FISCHER C L.
EBNER R.
BREWER L A.
MOORE P A.
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YOUNG P E.
GREENE J M.
FERRIE A M.
DUAN D R.
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ROSEN C A.
SOPPET D R.
CARTER K C.
BEDNARIK D P.
ENDRESS G A.
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GREENE J M.
FERRIE A M.
DUAN D R.
                                                                                          SUGEN INC.
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LI Y.
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                                                                                                                                                                                                                                            U
                                                                                                                                   protein;
initiation
                                                                 5.7%;
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34.0%;
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                                                                                                                                   548 AA.
n factor
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n seq
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Pred.
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Pred.
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No. 1
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No. 1.
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No. 1.
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                                                                   DB 8;
.5e+02;
                                                                                                                                                                          DB 7;
.5e+02;
                                                                                                                                   99d
                                                                                                                                    subunit
                                                                                                                                                                                     Length
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                                                                               Length
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Facilian 1.1 1 militar of

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Match

Best Local Similarity

RESULT 1472

ID ABC81139 stand

DE Pseudomond

PN US65
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Best Local Similarity
RESULT 1464
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05-OCT-1994.
(TAKE) TAKEDA CHEM IND LTD.
(TAKE) TAKEDA CHEM IND LTD.
5.7%;
ery Match 54milarity 29.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR58660 standard; protein;
Human PACAP receptor type 11
EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR58661 standard; protein;
Human PACAP receptor type 1-
EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumour associated antigenic target WO2004030615-A2.
                                                                                                                                                                                                    r 1470
ADS10834 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                       ABB11705 standard; peptide; 588 AA.
Human GABA transporter homologue, SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR58662 standard; protein; 553 AA.
Human PACAP receptor type 1C protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME
                                                                                                             ABU38306 standard;
Protein encoded by
                                                                                                                                                                                       Human therapeutic WO2004080148-A2.
                                                                                                                                                                                                                                                                                                 ADP98892 standard; protein;
C. albicans specific gene, o
                                                                                                                                                                                                                                                                                                                                                                                                                       (TAKE ) TAKEDA CHEM IND LTD.
ry Match 5.7%;
t Local Similarity 29.9%;
                                   ABO81139 standard; protein; 660 AA
                                                                                                                                                                                                                                 (ELIT-) ELITRA PHARM INC.
(ELIT-) ELITRA CANADA LTD.
5.7%;
ry Match 5.7%;
Local Similarity 26.2%;
                                                                                                                                                                                                                                                                                        WO2004056965-A2.
                                                                                                                                                                                                                                                                                                                                                                   )9-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TAKE) TAKEDA CHEM IND LTD.
ry Match 5.7%;
t Local Similarity 29.9%;
                                                                                                                                                                    NUVE-) NUVELO INC.
                                                                                                                                                                                                                                                                                                                                                        HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                Local Similarity
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                                                       IT-) ELITRA PHARM INC.
5.7%;
Match
5.7%;
Occal Similarity 26.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENENTECH INC.
                       aeruginosa polypeptide
                                                                                                              protein; 634
Prokaryotic (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.7%;
34.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.7%;
34.0%;
                                                                                                                                                                                                                                                                                                                                  19.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             type 1B
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type 1-B2 p
                                                                                                                                              5.7%;
                                                                                                                                                                                                                                                                                                  ; 597 AA.
orf6.4254,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553 AA.
B protein.
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Pred. No.
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Pred.
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Pred. No.
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Pred.
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Pred.
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Pred. No. 1.
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Pred.
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Pred. No. 1.
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                                                       .5
1
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. 1.6e+02;
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                                                                                                                                                                                                                                                                                                  protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 8;
.5e+02;
                                                          DB 6;
.8e+02;
                                                                                                                                                                                                                                    DB 8;
.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2;
.5e+02;
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                                                                                                              gene #23833
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                                                                                                                                                                                                                                                                                                                                              588;
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Best Local Similarity RESULT 1473
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RESULT 1475
                                                                                                       Best Local Similarity
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                                              Query Match
                                 USboods.
24-JUN-2003.
(GENO-) GENOME THERAPEUTICS (
GENO-) GENOME THERAPEUTICS (
5.7%;
ery Match 5.7%;
20.3%;
AAB46310 standard;
H. pylori HPS115 px
WO200073502-A2.
                                                                                                                                                                                                                                                                        Arabidopsis cell
WO200185946-A2.
                                                                                                                                                                                                                                                                                                                                           Arabidopsis thaliana EP1033405-A2.
                                                                                                                                                                                                                                                                                                                                                                                                     06-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                                             AAG20245 standard; protein; Arabidopsis thaliana protein EP1033405-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENO-)
                                                                                                                                                                                          ADS23914 standard; protein;
Bacterial polypeptide #1294
US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB53933 standard;
                                                                                               ADC95469 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200266501-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FR2807446-A1.
                                                                            US6583275-B1.
                                                                                                                                                                                                                                                                                 AAU72535 standard; protein; 724
Arabidopsis cell cycle protein (
                                                                                                                                                                                                                                                                                                                                                             AAG20244 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HYBR-) HYBRIGENICS
(INSP ) INST PASTEU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABU50927 standard; protein;
                                                                                                                                             (HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                                                                                                                                                                                                                                                                                                                                                ocal Similarity
                                                                                                                                                                                                                                  ocal Similarity
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h 5.7%;
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h 5.7%; Score 68.5;
Similarity 22.1%; Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INST PASTEUR.
                                                                                                                                    GOLDMAN B
                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pylori selected
         d; protein; protein.
                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein;
protein )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein;
                                                                                                                                                                                                                                                     7
                                                                                                                                                                                                                                 5.7%;
22.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.7%;
19.2%;
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                                                                                                                 5.7%;
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22.3%;
                                                                                                                                                                                                                                                                                                                                                                                5.7%;
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                                                                                                                                                                                                                                                                                                                                                    protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; 670 AA.
kup1.
                                    Score 68.5;
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         663 AA.
n fragment
                                                                                                                                                                                                                                                                                                                                                    724 AA.
n fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           691 AA.
d interacting
                                                                                     738 AA.
SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                704 AA
                   788 AA
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Pred.
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Pred.
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Pred.
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                                                                                                                                                                                                                                                                                                               No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   No. 2e+02;
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No. 1.
                                                                                                                                                                                                                                                                                                                                                                                 68.5;
No. 2.
                                                                                      5096.
                                                                                                                  68.5;
No. 2
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                                                                                                                                                                                                                                   DB 5;
                                                                                                                                                                                                                                                                                                               DB 3;
.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                  DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 5;
.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 3;
.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 7;
.9e+02;
                                                                                                                  DB 8;
.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             domain
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                                                                                                                                                                                                                                                                                                                         724;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               691;
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ARMUTY
INOUE H.

-C/) MUCKLER M.

-y Match

-set Local Similarity

AESULT 1485

ID AAY92110 standar

DE Human WFS1 pr

PN W020001877

PD 06-APP

PA (UP)
  RESULT
ID AA
                                                                                                                                Best Local Similarity RESULT 1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PA PA PA
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RESULT 1482
                                                                                                                                                                                                                                                                                                                                                                                                                         PA PA PA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
RESULT 1483
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Best 1
                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-2000.
(UNIW ) UNIV WASHINGTON.
(PERM) PERMUTT M A.
(INOU/) INOUE H.
(MUEC/) MUECKLER M.
                                                                                                                                                                 (UNIW ) UNIV WASHINGTON.
(PERM/) PERMUTT M A.
(INOU/) INOUE H.
(MUEC/) MUECKLER M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-DEC-2000.
(PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN (CREA-) CREATOGEN GMBH.
 AAY92104 standard;
                                                                                                AAY92100 standard; protein; 890 WFS1 polypeptide. W0200018787-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY92103 standard; protein; 885
Human WFS1 mutant DEL508 YVYLL.
WO200018787-A1.
                                                                                                                                                                                                                        AAY92109 standard; protein; 890 AA
Human WFS1 polymorphism R456H.
WO200018787-A1.
                                                                                                                                                                                                                                                                                                                                             Human WFS1 polymorphism I333V.
WO200018787-A1.
                                                                                                                                                                                                                                                                                                                                                                   AAY92110 standard; protein; 890 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200018787-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY92107 standard; protein;
Human WFS1 mutant P504L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY92105 standard; protein;
Human WFS1 mutant G695V.
                                            (MUEC/) MUECKLER M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VO200018787-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UNIW ) UNIV WASHINGTON.
(PERM/) PERMUTT M A.
(INOU/) INOUE H.
(MUEC/) MUECKLER M.
                                                                                                                                                                                                                                                                                        (UNIW ) UNIV WASHINGTON.
(PERM/) PERMUTT M A.
(INOU/) INOUE H.
(MUEC/) MUECKLER M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UNIW ) UNIV WASHINGTON.
(PERM/) PERMUTT M A.
(INOU/) INOUE H.
                                                       UNIW ) UNIV WASHINGTON PERM/) PERMUTT M A. INOUS H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MUEC/) MUECKLER M.
                     Local Similarity
                                                                                                                                                                                                                                                               ocal Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CREATOGEN GMBH
protein; 890
                     5.7%;
23.8%;
                                                                                                                                             5.7%;
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23.8%;
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23.8%;
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23.8%;
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23.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          890 AA
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                       Score
Pred.
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Pred.
                                                                                                                                             Score
Pred.
                                                                                                                                                                                                                                                                  Score 68.5;
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                          Score
Pred.
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Pred.
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Pred.
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                        68.5; DB 3;
No. 2.9e+02;
                                                                                                                                             68.5; DB 3;
No. 2.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68.5; DB 3;
No. 2.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68.5; DB 3;
No. 2.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                       9.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; DB 4;
2.4e+02;
                                                                                                                                                                                                                                                                    DB 3;
.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                          DB 3;
.9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      788;
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Best Local Similarity
RESULT 1495
                                                                                                                                                                                       Best Local Similarity RESULT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
RESULT 1489
                                                                                                                                                                                                                                                                                              Best Local Similarity RESULT 1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
RESULT 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity RESULT 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1490
                                                                                                                                                                                                                  Query Match
                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            O2-MAY-2002.
O2-MAY-2002.
(CHIR-) CHIRON SPA.
(GENO-) INST GENOMIC RES.
S.7%; (
                                     AAB30730 standard; protein; 3015 AA. Amino acid sequence of chimeric Hepatitis W0200075338-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABP29861 standard; protein; 894 AA. Streptococcus polypeptide SEQ ID NO W0200234771-A2.
                                                                                         (USSH) US DEPT HEALTH & HUMAN RESOURCES.

5.7%; Score 68.5; DB 2;
Local Similarity 25.8%; Pred. No. 4.8e+02;
                                                                                                                                                             AAW88448 standard; protein; Caenorhabditis elegans NPC1
                                                                                                                                                                                                                                (BLIT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY92102 standard; protein; 937 AA.
Human WFS1 mutant del882fs/ter937.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABP28153 standard; protein; Streptococcus polypeptide SI WO200234771-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human WFS1 mutant P724L. WO200018787-A1.
                                                                                                                                               WO9901555-A1.
                                                                                                                                                                                                                                                         WO2003052076-A2.
                                                                                                                                                                                                                                                                     C. neoformans amino
                                                                                                                                                                                                                                                                                   ADB70303 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                  ADN19015 standard; protein; 1004 AA.
Bacterial polypeptide #1668.
US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UNIW ) UNIV WASHINGTON.
(PERM/) PERMUTT M A.
(INOU/) INOUE H.
(MUEC/) MUECKLER M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CHIR-) CHIRON SPA. (GENO-) INST GENOMIC
(USSH) US DEPT HEALTH & HUMAN SERVICES.
ry Match 5.7%; Score 68.5;
                                                                                                                                    14-JAN-1999
                                                                                                                                                                                                                                                                                                                                     (GOLD/) GOLDMAN B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (INOU/) INOUE H. (MUEC/) MUECKLER M.
                                                                                                                                                                                                                                                                                                                                                             (CAOY/) CAO Y.
(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   √O200018787-A1.
                                                                                                                                                                                                                                                                                                                                                   (CHEN/) CHEN X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PERM/) PERMUTT M A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                              ELITRA PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UNIV WASHINGTON
                                                                                                                                                                                                                                                                    protein; 1178 AA.
o acid sequence SEQ ID NO:3347
                                                                                                                                                                                                    5.7%;
19.8%;
                                                                                                                                                                                                                                                                                                           5.7%;
19.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RES.
5.7%;
22.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.7%;
23.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.7%;
23.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID
                                                                                                                                                          1296 AA.
protein orthologue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      894 AA.
EQ ID NO
                                                                                                                                                                                                    Score
Pred.
                                                                                                                                                                                                                                                                                                            Score
Pred.
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Pred.
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Pred.
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 68.5; DB 3; Pred. No. 2.9e+02;
                                                                                                                                                                                                                                                                                                              68.5;
No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        68.5;
No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No.
                                                                                                                                                                                                    68.5; DB 7;
No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68.5; DB 5;
No. 2.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5482
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 3;
                                                                                                                                                                                                                                                                                                              DB 8;
.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 5;
.9e+02;
                                                      a
  BB
                                                    virus
 4:
Length
                                                                                                                                                                                                                  Length 1178;
                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
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                                                                                                                                                                                                                                                                                                                         Length
                                                    clone pH77CV-J6S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          894;
  3015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    894;
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regist of the part

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protein; 247 AA.

247 AA.

247 AA.

20-UN-2001.

PA (KYOW) KYOWA HAKKO KOGYO KK.

Query Match
Best Local Similarity 23.1%; Pred. No. 55;

RESULT 1500

ID AAY41212 standard; protein; 250

PN W09951753-A1.

PD 14-OCT-10-1
                                                                                                                                                                                                                                                                                                                                                   Query Match

Best Local Similarity 23.5%; P

RESULT 1498

ID AAB78946 standard; protein; 24

DE C. glutamicum SRT protein seque
PN WC200100804-A2.
PD 04-JAN-2001.
PA (BADI) BASF AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 2.
RESULT 1496
ID AAB30732 standard, prol
DE Amino acid sequence of
PN W0200075338-A2.
PD 14-DEC-2000.
                                                                                                                                                                                         Query Match
Best Local Similarity
RESULT 1499
ID AAG91355 standard; pr
DE C glutamicum protein
PN EP1108790-A2.
PD 20-UN-2001.
PA (KYOW) KYOWA HAKKO K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB30732 standard; protein; 3015 AA.
Amino acid sequence of chimeric Hepatitis C virus clone J6S.
W0200075338-A2.
14-DEC-2000.
(USSH ) US DEPT HEALTH & HUMAN SERVICES.
STY Match
STY Match
STY Score 68.5; DB 4; Length 3015;
ST Local Similarity 26.7%; Pred. No. 1.5e+03;
                                                                                                                                                                                                                             AAG91355 standard; protein; 247 AA.
C glutamicum protein fragment SEQ ID NO: 5109.
EP1106790-A2.
                                                                                                                                                                                                                                                                                                                                                 AAB78946 standard; protein; 247 AA.
C. glutamicum SRT protein sequence SEQ ID NO:152.
W0200100804-A2.
04-JAN-2001.
(BADI ) BASF AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADK16845 standard; protein; 200 AA.
Nanoarchaeum equitans cancer-associated (CA) protein #398.
W02003093434-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DIVE-) DIVERSA CORP.
Local Similarity
                                                                                                                                                                                                                                                                                                             5.7%; Score 68; DB 4; Length 247; 23.1%; Pred. No. 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26.7%; Pred. No. 1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 68; DB 8; Pred. No. 41;
Score 68; DB 2;
Pred. No. 59;
                                                                                                                                                      DB 4;
                Length 258;
                                                                                                                                                                        Length 247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 3015;
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Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number
  on:
                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                 Score
   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of hits satisfying chosen parameters:
                                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              May 17, 2005, 10:22:46 ; Search time 138 Seconds
(without alignments)
566.436 Million cell updates/sec
  1195
1 MNHLPEDMENALTGSQSSHA.....EAGSEEAEEKQDSEKPLLEL 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1432185 seqs, 334051727 residues
                                                                                                                                                                                                                                                                                  : /cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.pep:*
: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*
: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*
: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*
: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*
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	Sequence 7040, Ap	Sequence 24, Appl	Sequence 68, Appl	Sequence 2097, Ap	Sequence 1, Appli	Sequence 172, App	Sequence 2574, Ap	Sequence 34, Appl	Sequence 33, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 354, App	Sequence 356, App	Sequence 7661, Ap	Sequence 62030, A	Sequence 93, Appl	Sequence 118741,

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